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ABSTRACT

This monograph considers the clinical concept as used by professions other than teaching to help clarify the meaning of clinical experience and clinical practice in teacher education. Papers are presented from the professions of clinical psychology, allied health, business, and nursing. The following questions were posed to the authors for answers: (1) How are the terms "clinical experience" or "clinical training" used in your profession? (2) Are similar terms used to represent a period of on-the-job training under the guidance of an experienced practitioner? (3) Is this training concentrated prior to entrance to the profession, or available as well for skill updating by experienced professionals? (4) What issues seem to be significant in this realm of your profession? (5) How is the experienced practitioner chosen for this role as trainer? (6) Is specialized training required for the role? (7) How are these training personnel recognized for their professional contributions? and (8) Are they specially credentialled? The final paper in this monograph deals with clinical experience and clinical practice in teacher education. Reference lists are included. (RC)

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Clinical Experiences and Clinical Practice in Professional Education

SCHOOL BASED TEACHER EDUCATION

2

FEBRUARY 1976

Clinical Experiences and Clinical Practice in Professional Education

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'When I use a word,' Humpty Dumpty said, in a rather scornful tone, 'it means just what I choose it to mean -- neither more nor less.' (Lewis Carroll: Through the Looking Glass VI)

words

Lewis Carroll might have been thinking of teacher education when he penned these lines. Given the proliferation of pedagogese, teacher educators by the hundreds have taken to hanging posters above their desks which begin "I know you think you understood what you thought I said...."

And yet, in the long run, words are the major vehicle available to us in communicating with one another.

"clinical"

A word that has achieved broad usage in teacher education over the past decade is "clinical." Clinical experience, clinical schools, clinical sites, clinical supervision, clinical professor, and--occasionally--clinical practice--have achieved idiomatic status in teacher education. Yet the more one delves into the various uses of "clinical" in this context, the more confusion reigns. The Dictionary of Education (Good, 1973, pp. 106-107) lists no less than forty-six uses of the terms "clinic" and "clinical." "Clinical experience," for example, has at times been broadly interpreted as virtually any type of experience that occurs outside the classrooms of the institution of higher education; while in other contexts it has been defined narrowly as a decisioning procedure.

teachers

The staff of the School-Based Teacher Educators Project gradually came to these

realizations, and concurrently became concerned about the general lack of agreement in teacher education about what clinical experience is, and what it is supposed to accomplish--especially given statements such as the following from preminent teacher educators:

> The most universally accepted tenet in teacher education today is that clinical experiences are not only desirable in the preparation of teachers but essential (Bennie, 1972, p.2).

If clinical experience is essential in the preservice preparation of teachers, then clinical experience should have value in inservice teacher education as well. And the School-Based Teacher Educator could be a central focal agent to accomplish this linkage between preservice and inservice--perhaps even becoming a clinical practitioner to accomplish these ends.

In a previous monograph in this series, a rationale for and distinction among various types of School-Based Teacher Educators has been delineated. The purpose of the present monograph is to consider the clinical concept as used by other professions to help clarify the meaning of clinical experience and clinical practice in teacher education. To this end, papers were commissioned from four other professions: clinical psychology, business, allied health professions and nursing. The following questions were posed to authors of each paper.

&others

1. How are the terms "clinical experience" or "clinical training" used in your profession?
2. Are similar terms used to represent a period of on-the-job training under the guidance of an experienced practitioner?
3. Is this training concentrated prior to entrance to the profession, or available as well for skill updating by experienced professionals?*
4. What issues seem to be significant in this realm of your profession?
5. How is the experienced practitioner chosen for this role as trainor? Is specialized training required for the role?
6. How are these training personnel recognized for their professional contributions? Are they specially credentialed?

Each paper took an idiosyncratic approach to addressing the questions posed. The result is a diverse and informative insight into clinical experience and clinical practice in professional education which should prove valuable to teacher educators.

concluding

The final paper in this monograph includes:

...a brief review of the literature on professions other than those included in the four major papers

...a series of generalizations that seem to apply to clinical experience and clinical practice across the professions studied

---

*This question was designed to seek information about practices analogous to inservice teacher education.

...a review of various uses of the term "clinical" in teacher education

...a proposed set of criteria for clinical experience in teacher education

...a proposal for the addition of two novel terms to the lexicon of teacher education: clinical practice in teaching and the teacher education clinician.

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Clinical Psychology

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Clinical psychology, according to a major recent conference on the subject, includes the following broad functions: "psychological analysis and assessment for decision-making purposes; psychotherapy and other forms of behavior modification; psychological investigation (research and evaluation); training and education; consultation; administration" (Hoch, Ross, & Winder, 1966, p. 50). While it is not expected that any one clinical psychologist will be equally competent in all these functions, a comprehensive training program would introduce the clinical psychology student to each function and prepare the student well for some of them.

THE TRAINING PROCESS

Clinical psychology is an applied field based primarily on theoretical approaches, concepts, and knowledge accumulated in psychology. The clinical psychologist is described as a scientist-professional, a description which captures some major characteristics of the training of the clinical psychologist as well as expectations regarding subsequent professional behavior.

THE TRAINING

Clinical psychologists are trained along with other psychologists in research, in basic areas of psychology as well as in the applied subject-matter of the specialty. Graduate training consists of the CORE CURRICULUM OF THE DEPARTMENT--at least research design and statistics, often also courses in various fields of psychology, e.g., physiological, cognitive, social, developmental; the CORE CURRICULUM OF THE CLINICAL PROGRAM, e.g., assessment, intervention, psychopathology, personality theory, research--at least a doctoral dissertation, frequently also a Master's thesis; a QUALIFYING EXAMINATION in clinical psychology, frequently in other fields as well; PRACTICUM--supervised

clinical experience in a variety of settings, some in the university, most in agencies and centers in the community, typically for four semesters part-time (eight to twenty hours per week), sometimes for six semesters; and INTERNSHIP, twelve months, full-time, in a setting within the community or away--students generally select from internship opportunities around the country

Training for clinical psychologists is typically a year longer than for other psychology students because of the internship requirement. Most programs consider 5 years of graduate training to be normal. At the point of graduation a clinical psychologist is expected to be capable of independent design, conduct, and evaluation of research; to understand the assumptions, strengths, weakness, and appropriate uses of various types of psychological assessment and intervention techniques; and to be ready to serve as a resource for other professionals in the definition and solution of problems of a psychological nature.

The scientist-professional is the almost universal description and ambition for the product of clinical psychology programs. In recent years a professional model has made its appearance--first, at the University of Illinois, more recently at Rutgers University. The curriculum in these latter programs is as long, does not require research performance (although sophisticated consumerism is stressed), emphasizes professional training more heavily, and culminates in the Psy. D. (Doctor of Psychology) degree instead of the Ph.D. There are still fewer than five such programs among approximately 100 APA approved doctoral programs in clinical psychology (1974) in the U. S.

SELECTION OF STUDENTS

The scientist-professional model for clinical psychology has clear implications for selection of students into programs. Students should have aptitudes for conceptual, theoretical, and scientific pursuit, as appropriate for Ph.D.'s in an experimentally oriented discipline. Students should have strong social interests, sensitivity,

empathy, and emotional maturity as appropriate for professionals who will study, and intervene in, the problems of other human beings.

The combination of the mathematically logical, data oriented, critical experimenter and the intuitive, concerned, sensitive, person-oriented, professional is surely possible to find; there are splendid examples of clinical psychologists who personify the blend. More usually a choice must be made among the relative strengths within candidates. Candidates with low scientific aptitude are most unlikely choices, regardless of their professional or interpersonal skills.

"What characteristics does the 'right kind' of person possess?" asks a 1947 report of the American Psychological Association's Committee on Training in Clinical Psychology--and answers:

> ...the following list...includes the kind of specific qualities experienced observers believe clinical work calls for...

1. Superior intellectual ability and judgment.
2. Originality, resourcefulness, and versatility.
3. Fresh and insatiable curiosity; "self-learner."
4. Interest in persons as individuals rather than as material for manipulation--a regard for the integrity of other persons.
5. Insight into own personality characteristics, sense of humor.
6. Sensitivity to the complexities of motivation.
7. Tolerance; "unarrogance."
8. Ability to adopt a "therapeutic" attitude; ability to establish warm and effective relationships with others.
9. Industry; methodical work habits; ability to tolerate pressure.
10. Acceptance of responsibility.

11. Tact and cooperativeness.

12. Integrity. self-control, and stability.

13. Discriminating sense of ethical values.

14. Breadth of cultural background--'educated man'.

15. Deep interest in psychology, especially in its clinical aspects. (A.P.A., 1947)

The Committee does not advise how many fewer, if any, than the 15 qualities might be acceptable. It is surely a sign of the modesty of the Committee that it does not claim that a person with these 15 qualities might not, perhaps, also qualify for some other profession.

Clinical psychology has not developed selection instruments or standard criteria for applicants. Undergraduate preparation and grades, the Graduate Record Examination, letters of reference, statements or student goals, and personal interviews--some or all appear to be used by the various programs.

THE TRAINING SETTING

Traditionally, and to date in almost all cases, the clinical training program is part of a psychology department in a college of arts and sciences or in a college of social sciences; it does not typically constitute nor does it typically reside in a professional school or college. There are exceptions, very few. In these exceptional cases the model is apt to be a professional model and the degree a professional degree, e.g., Psy. D.

The California School of Professional Psychology, established in 1969, is the first autonomous professional school of psychology. As though to challenge the statement on degrees in the previous sentence, the school proudly announces that it offers the Ph.D. degree (Pottharst, 1970).

Within the academic, university department, clinical students obtain their training in the university and in field settings, the

latter providing the practicum experience and internship. Field settings are of many types, most can be grouped as hospitals and medical centers, clinics, schools, or correctional agencies.

TRAINING, TRAINEES, AND TRAINERS

Students are trained in the practice by clinical psychologists, trainers who have been trained to practice but, not necessarily, to train. From the literature on recommended graduate training and reports by training agencies on "how it is done", the following principles appear to govern field training in clinical psychology:

PRINCIPLE ONE: Graduated experiences. Students begin with functions and duties that are considered simple and proceed to more complicated tasks. Although it is not universally agreed what are the simple functions, it is more usual for students to begin with interviewing of subjects, and giving intelligence tests, moving then to personality tests before beginning to engage in psychotherapy. The sequencing of training is, in the best of circumstances, coordinated with classroom background and introduction to the various experiences.

PRINCIPLE TWO: Watching and listening. Students are very likely to observe, through one-way screens or by "sitting in" while staff members or advanced students do assessments, or therapies, or consultations. Students are also expected to attend case conferences at which staff members and students from various disciplines report their findings and discuss plans related to their clients. Such "watching and listening" may take place before or during the first phases of "doing."

PRINCIPLE THREE: Being watched and heard. Students are observed by staff supervisors, as the students do testing, interviewing, or therapy. One-way screens, tape recordings (audio or, recently, video), and "sitting-in" are the most generally used procedures. Tapes are played back and reviewed in supervisory sessions.

PRINCIPLE FOUR: Face-to-facing. Trainee and trainer meet regularly in one-to-one supervisory sessions to review and evaluate the work of the trainee. The supervisor is part technique specialist

and part psychotherapist in these sessions, providing guidance in the student's work as well as helping the student to recognize the effects of his or her characteristics on professional performance.

PRINCIPLE FIVE: Responsibility. Students accept responsibility for functions which they perform with clients, for reporting findings verbally and in writing and, as they advance, for partial supervision of less experienced students. Staff members are legally and ultimately responsible for services to clients, however, when in contact with a client, the student is expected to behave professionally, like a staff person.

THE PROFESSIONAL--STATUS AND GROWTH

CERTIFICATION AND LICENSURE

Forty-seven states and the District of Columbia presently have licensing or certification laws governing practice of psychology. These laws are not specific to, but include, clinical psychology. Typically required for licensing are a doctoral degree from a regionally accredited university or college, in a program that is primarily psychological, and two years of supervised experience, one of which is subsequent to the granting of the doctoral degree. The licensing laws, written by psychologists, on a pattern proposed by the American Psychological Association, express the expected training standards for professional entry.

The American Psychological Association further certifies for advanced and fully competent specialization in professional practice through the American Board of Professional Psychologists, on written, oral, and performance examination. Eligibility is established after "five years of acceptable qualifying professional experience during which time the candidate shall have demonstrated superior performance. Four years of this experience shall be postdoctoral" (Kelley, Sanford, & Clark, 1961, p. 133).

CONTINUING EDUCATION

Continuing education is a very lively topic among psychologists today. The most recent national conference on professional training in psychology strongly advocated the inclusion of continuing education as an integral part of professional training (Korman, 1974). The American Association of State Psychology Boards has urged member boards to implement continuing education requirements for license renewal--three states have already done so and at least eight others are considering such legislation (Jones, 1975). The American Board of Professional Psychology has recently established a National Academy of Professional Psychologists, to be a network of continuing education programs conducted in collaboration with academic and other institutions around the country (Ross, 1974).

Less formally, continuing education has been offered by the American Psychological Assocation for many years--the programs at the annual meetings of the Association, the annual workshops of the Division of Clinical Psychology, and the Visiting Psychologist Program of A.P.A., are some instances. But the issue of continuing education is passing from the informal, voluntary state to an organized, formal, required condition for psychologists, especially those who provide professional services to the public.

TWO SIGNIFICANT ISSUES IN CLINICAL PSYCHOLOGY

1. DIVERSITY OF TRAINING

The level of training for professional psychology is uniform across the country (the doctoral degree). There is, however, considerable variation in what constitutes clinical training, reflecting changes in practice of clinical psychology. The decline of traditional personality theories, and the questioning of established assessment and psychotherapeutic techniques; concerns over the "reach" of the mental health professions and the consequent turn to community and early intervention

approaches; the emergence of humanistic, encounter, human potential movements on the one hand and programs of direct modification of behavior on the other--all shaped by social forces as well as by developments within the mental health professions, have had their effects on the nature of the clinical psychology and on graduate training.

Some gloomy prognosticators within the field even foresee clinical psychology diffusing itself out of existence. This dim view is not widely shared, but it does express a consciousness that clinical psychology has lost the clarity of purpose and the strong faith in its theories and methods which characterized the 1950's.

Two publications illustrate the state of complexity of the field. A recent volume on clinical psychology (Sundberg, Tyler, and Taplin, 1973) presents a horrendous composite definition which emerges from their review of the field:

> Clinical psychologists, usually doctorates in psychology with several years of experience,
>
> working with a sociocultural milieu including a sponsoring organization confront
>
> problems of psychobiological and psychosocial distress and behavioral disorder
>
> with the goals of maintaining and enhancing the functions of persons, singly and collectively,
> through
> occupying a variety of occupational roles in a variety of settings, acting within a conceptual framework related to behavioral science, and performing the tasks of designing improvement plans
> through appraisal of clients and situations, thereby providing realistic and constructive image building and decision making,
> implementing improvement programs through communication and effective cooperation with clients and their significant surroundings, and use of such skills as psychotherapy, behavior modification, and consultation,
>
> and
>
> evaluating program effectiveness,
> meanwhile contributing to

the managing, teaching, and training of others
and
the furtherance of knowledge of the human condition. (p. 475)

In 1959, a summary volume (Harper, 1959) appeared presenting 36 psychotherapy systems in use at that time. In 1975, the same author finds more than 30 new psychotherapies to add (Harper, 1975). He characterizes the change in a preface to the 1975 volume:

> In the period of time since (the first volume)... tremendous changes have been made in the broad and increasingly amorphous area of psychotherapy. Certain tidy conceptions about psychotherapy that could be held with cool confidence in the late fifties sound like the weak and soulful notes of an orthodox isolate in the sixties and seventies.(p. xi)

PROFESSIONAL ENTRY--LEVEL OR LEVELS?

The doctorate is the entry level for independent practice in clinical psychology. However, thousands of persons throughout the country occupy positions of responsibility in psychological services but have only Master's degrees. These Master's degrees were granted, and continue to be granted, by university departments of psychology. Master's level psychologists can be licensed to independent practice in a very few states (perhaps four), after several years of supervised practice. In all other states they may be licensed as "psychological associates" or by some other secondary designation, may not call themselves "psychologists," and may practice only under the supervision of a licensed psychologist. Also, Master's level psychologists cannot become full members of the A.P.A.

A questions arises whether there are professional functions in psychology which can properly be taught and performed at the Master's level. The most recent national conference on professional training in psychology answered, "yes" (Korman, 1974) but the membership of A.P.A. has in 1974 voted "no" to granting membership for Master's degree holders, and their status remains unchanged.

The training of Master's level psychologists continues, in

departments in which the Master's is the highest degree offered as well as in departments which grant the doctorate. It is frequently difficult to distinguish between Master's degrees granted for training in professional psychology and those granted in purely academic psychology, since specialty areas are not generally marked off at that level. Also, there are no instruments for accrediting Master's level programs and therefore, no dependable standards for judging the scope or quality of training.

The problem is exacerbated by the legitimacy which the Master's degree commands for professional neighbors in social work and in counseling fields of various sorts, where very similar or identical functions are performed. The movement toward licensing social workers and various types of counselors may give Master's level psychologists opportunities to be licensed under other names without the sanction or the control of psychology.

Basic to the Master's degree problem, which has troubled psychology without solution for many years, is a reluctance to accept the training, in skills and techniques only, as a sufficient basis for professional practice. And, perhaps, an uneasy professionalism in a traditionally academic and scientific discipline, which is not ready to label service skills and techniques as the "tools of the trade," but rather considers the underlying inquiry and conceptualizing as the proper occupation, as well as the mark, of the psychologist.

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Clinical Experience in Allied Health Professions Education

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This paper is intended to describe current use of clinical experience in allied health professions education for purposes of comparison with teacher education. As will be seen, direct comparability is not possible, but the authors have endeavored to locate sufficient points of contact to accomplish identification of selected relationships.

Any serious difficulty in attempting to relate allied health professions education to teacher education generally arises because of the variation within the health professions themselves, which are in an unprecedented period of growth, both in numbers of personnel and, more significantly, occupational titles. The present situation in allied health cries out for definition and system. Responsible federal agencies and professional associations are actively engaged in responding to that need, but a great deal more remains to be done.

SOME DEFINITIONS

While individual health professions can be readily identified and described, there is no generally accepted definition of the field of *Allied Health*. Professional organizations representing over a score of occupational titles, are affiliated with the Council's Advisory Committee on Education for the Allied Health Professions and Services that was established in 1967. Its responsibilities have been enlarged to include a wide array of educational and other matters.

For purposes of this report, the most important function is defining standards for securing AMA approval of educational programs in allied health occupations. These standards, known as Essentials in that they describe "what (is) essential in the education for the occupation," are published annually (American Medical Association, 1974).

Affiliates of the AMA's Council on Medical Education do not exhaust the full array of allied health occupations. Nevertheless, the Allied

Medical Professions and Services Subcommittee on Terminology has been engaged in efforts to define allied health for the past three years. Their work has produced the following official statements:

> Allied Medical Personnel are "individuals who work under the general supervision or direction of a physician in providing medical service to members of the public while exercising independent judgment within their areas of competence."
>
> Allied Health Personnel represents "a broad category of personnel which includes professional and supporting workers in the fields of patient care, public health and health research, who assist independent health practitioners in providing health services (AMA, 1975b, p. 2)."

It should be apparent that personnel defined as belonging to the former category also fit into the latter, but the reverse is not true.

These definitions may be of some value to the AMA and its affiliated organizations, especially in the light of the rapid expansion in allied health fields. (For example, there are approximately 350 job titles and designations encompassed in the allied health personnel category.) However, such efforts raise as many questions as they answer. Operationally speaking, the distinctions embodied in these definitions receive little support. It has been true for some time that selected health fields have moved to disassocate themselves from definitions which retain the physician as overall head. The concept of the health fields in terms of a non-medical model. Nursing, dentistry and pharmacy are only three examples of professions that are emerging from a "para-medical" limbo into more independent identity. Thus, it is possible to interpret the definitions cited above as an effort to accommodate these centripetal forces while maintaining something approximating the old system. It seems likely that the proliferation of "sub-professional" health fields will fill the void left by the defection of fully-credentialled professional types.

Another perspective on allied health fields is provided by recognition that they display notable dissimilarities. Their clustering under the same rubric represents application of what may be described as "negative" bases. Health care is characterized by three functions of diminishing criticality: life-saving; reduction of pain; and improving or maintaining the quality of life. Compared with, say, medicine or nursing, allied health suffers because its sphere is more often restricted to the last of the three health care functions. They are also more limited in numbers, and enjoy lesser status than the older health professions, whose greater visibility and longer histories make them more prominent in the public eye.

A cursory review of professions represented on the numerous medical programs populating our television fare will underscore the perception. While physicians, especially neurosurgeons, and nurses are ubiquitous, the medical record administrator or physical therapist is rarely if ever depicted. Counting commercials, plumbers, short-order cooks and truck drivers are more frequently represented. Having been thrust together despite the wide differences in their character, allied health professions have reluctantly acknowledged the need for their clustering as a means to secure some measure of power and influence. This strategy has borne some fruit, but at the expense of accepting a broad professional framework more notable for its disparateness.

This last point helps to recast the issue of the definition of allied health. Since our objective is to provide information helpful in drawing comparisons with teacher education, it would seem more useful to restrict our attention to health professions where training is of similar duration and certification. This would eliminate the AMA's "allied health personnel." It is assumed that teacher education programs are typically undergraduate, of four years duration, and culminate in the baccalaureate degree. If we elect to include health professions with like training program characteristics in our review,

it is generally the AMA's "Allied Medical" category that applies. Therefore, the authors have elected to restrict their attention to that relatively small number of professions that meet the following criteria:

1. Training usually requires completion of an accredited undergraduate program leading to the baccalaureate degree, although the duration may exceed four years.

2. Functional descriptions of these occupations usually emphasize use of independent judgment in health care delivery.

3. Such professions exclude nursing, dentistry, pharmacy, medical social work, public health, and other specialities in medicine.

The authors will continue to refer to the same professions as "allied health" for purposes of consistency with their charge and prevailing practice. Thus, this paper will examine clinical experience in preparation for the following professions: Medical Art; Medical Dietetics; Medical Record Administration; Medical Technology; Occupational Therapy; and Physical Therapy.

An additional definition is called for before proceeding to a description of training for these occupations. The term *clinical experience* has also been the subject of discussion, culminating in one attempt at standardization which the authors include in full below.

Clinical experience is...

> that portion of an educational program during which the student is provided opportunities to apply academically acquired knowledge in a real work situation applicable to his or her field of preparation. Students are scheduled to participate in planned activities during specific blocks of time. The emphasis is on gaining skill in performing the basic precedures used in the field and on dealing with a variety of situations that are likely to be encountered on the job. Supervision must be provided by qualified, competent personnel; students need

> and expect close supervision and guidance during the early phase of this activity, but, the supervision should become more remote as the student demonstrates an acceptable level of competence in handling the responsibilities assigned. In general, a sharp distinction cannot be made between (clinical) 'education' and 'experience' in relation to helping students develop competence in the practical aspects of the field of preparation. However, the work 'education' is used to imply that the major focus is on gaining knowledge, skill and attitudes thru instruction; whereas, the word 'experience' is used to imply that the major focus is on gaining these through direct participation in events. Of course, these events may be directed and learning of specific things is the expected outcome in both situations. (AMA, 1975b, p. 4-5).

While the authors have used the term clinical *experience* as their area of inquiry, this definition establishes the absence of distinction from clinical *education*. Moreover, the authors also wish to point out other terms used when referring to such training components. The terms "field work experience," "internship," "clerkship," and "pre-clinical" may be, and are, used interchangeably. Within particular allied health professions, certain of these may be used to differentiate between clinical experience provided at various stages of training, reflecting institutional differences, but consistency between professions is lacking. At the same time it appears that the term clinical *practice* is usually restricted to performance on the job of the fully credentialled professional, and not in reference to the undergraduate student-in-training.

ESSENTIALS

Accreditation of allied health professions education usually calls for the preparation of a document intended to establish public standards for institutional programs. This document, known as Essentials are generally drafted and adopted by some organization concerned with the particular occupation. (If AMA accreditation is sought, these Essentials must be approved by the Council on Medical

Education.) Of the six allied health professions in the authors' sample, occupational therapy was the first to secure AMA approval, in 1935. Medical Technology and Physical Therapy followed in 1936, and Medical Record Administration in 1943. Updating and revision has continued to the present. Both Medical Art and Medical Dietetics have Essentials, but neither field has programs approved by the AMA. (The U. S. Office of Education approves programs accredited by the American Dietetic Association.)

The recommended format for Essentials includes entries under the following headings:

1. Objective of the standards.
2. Description of the occupation.
3. Identification of educational institutions (colleges, universities, hospitals, laboratories, medical schools).
4. Identification of clinical affiliations.
5. Description of classroom, laboratory and library facilities.
6. Description of financial resources, student fees, etc.
7. Qualification of faculty.
8. Procedures for selection, numbers, and counseling of students.
9. Description of records system.
10. Description of the curriculum.
11. Procedures for administration.
12. Identification of sources for applications and inquiries.

For purposes of this paper, those portions of the profession's approved Essentials that treat the requirements for clinical experience are of interest. It should be emphasized, however, that the degree of specificity varies greatly among the sample professions. Moreover, since the standards included in a profession's Essentials are used as minimal requirements, it can be anticipated that institutions will show variation in the degree to which they exceed these minima.

In the next section, specification of clinical experience for each of the six sample allied health professions will be discussed, based on review of the pertinent Essentials and personal communication.

CLINICAL EXPERIENCE IN SAMPLE ALLIED HEALTH PROFESSIONS

MEDICAL ART

The Association of Medical Illustrators accredits all programs in medical art. There are presently five programs in the United States and one in Canada. AMI is not presently affiliated with the American Medical Association, but negotiations have been initiated. The essentials for medical art programs do not include a requirement for clinical experience at the present time. However, the University of Illinois program instituted a clinical experience for their students last year. Because of the success of the program (as viewed by faculty, clinical supervisors and students alike), the program will be retained and the faculty is hopeful that they can interest other schools in the practice and that it will eventually become incorporated into the essentials.

The clinical requirement at Illinois consists of one full-time assignment for one quarter duration. Students spend four weeks at the clinical site, one week back at the university and another four weeks at the clinical site.

Evaluation includes assessments of the content and quality of the student's projects and their attitude and communication with the client.

These are completed midway and at the end of the experience. A grade for the experience is obtained from input from the client, the clinical supervisor and the faculty person in charge. The student also completes an evaluation of the site and the experience at the completion of the assignment.

The only qualification for the clinical supervisor is that he be a trained medical illustrator.

Students are charged regular tuition by the school and it is expected that they will have to pay no more for housing than that charged on campus. No fee is paid to the clinical site or supervisor. Those involved in the program last year were very enthusiastic about the experience and saw the students as an asset to the department. All the supervisors have requested additional students in the coming academic year.

MEDICAL DIETETICS

The American Dietetic Association accredits programs through its affiliation with the United States Office of Education.

There are two different patterns of education in this field.

1. Undergraduate baccalaureate with post-baccalaureate traineeship or internship of 6 to 12 months duration;
2. Coordinated undergraduate program.

Essentials for coordinated undergraduate programs require a total of 950 hours of clinical experience. These hours are distributed through the final two years but are generally more concentrated at the end. For example at the University of Illinois, the students spend a few hours per week observing during the first quarter of junior year while during the last quarter of the senior year they spend five forty-hour weeks at a clinical site.

Students are evaluated by clinical supervisors using rating scales devised by faculty of each school. Supervisors are encouraged to provide progressive evaluation throughout the experience but often formal

evaluation occurs only at the end of the experience. Students also evaluate the clinical experience for some of the assignments.

Clinical training sites must have a certain number of registered dieticians on the staff. Further, it is required that the supervisor of the student be a registered dietician. (There is currently a move in ADA to separate registration from membership).

Students pay regular tuition to the school and no remuneration is received by the clinical center or supervisor. Some supervisors are given non-salaried faculty appointments by the university.

MEDICAL RECORD ADMINISTRATION

The American Medical Record Association is affiliated with the American Medical Association in accrediting school programs. The present essentials are in the process of revision. The term used by this field is "directed practice" and the essentials require an explicit number of hours-- 2 weeks of which are to be a "major affiliation" in which students have experience in management and get an overall picture of the department and the hospital. Other directed practice hours are short-term, aimed at skill-building and are integrated with didactic work.

The University of Illinois program has always had more directed practice than required by the essentials. During the summer, fall and winter quarters the students spend varying amounts of time in a clinical area and are supervised by faculty and some employees of the medical record department. In the spring the students spend four four-day weeks in the management directed practice experience, two four-day weeks in a specialty hospital experience and two four-day weeks at the University Hospital plus some short term experiences in H.M.O. and nursing home settings.

Evaluation forms used for the directed practice are those developed by the University of Illinois and are generally task lists with a yes/no checklist format. They are customized for each experience and relate to specific tasks to be accomplished during that particular experience.

The faculty has used both checklist and narrative formats but dissatisfaction exists because different supervisors in the outside centers use differing standards in evaluating the students. The faculty has developed manuals with procedure and forms for each experience in an effort to standardize experiences.

Much of the directed practice is supervised by the university faculty. When the students go to an outside center, the faculty prefers that they work with the department heads and their assistants so that the students have the opportunity to be involved with managing the department. The qualification for supervisors is that they be Registered Record Administrators. The faculty also visits the clinical sites to see that there is enough room for the students and that the experiences available are appropriate. The University generally does not send students to centers when there is a technical level training program.

Students pay regular tuition to the school. Recently the university has offered remuneration to some clinical sites, depending on the number of years they have participated in the clinical experience and the number of times students go to the center. These payments may be made to the center or the supervisor, depending upon the hospital's policies or if the supervisor does extra work on her own time. However, these payments have been made possible by external funding. In addition, students conduct workshops for employees of centers as a kind of repayment for the experiences. The University also conducts seminars for supervisors and offers non-salaried faculty appointments to supervisors who are more involved with providing clinical experiences for students.

MEDICAL TECHNOLOGY

Medical Technology programs have long been associated with on-the job training and many programs continue to be hospital based. Only a relatively few programs are university based and some of these are still more of a on-the-job-training than not, with students receiving much of their training in actual service laboratories.

Students at the University of Illinois have experiences in both student labs and service labs. In student labs, they practice specific skills acquiring proficiency in carrying out specific tests. They then move into service labs, still practicing skills by systems but they now learn to deal with increased volume of work. These experiences are accomplished during five half-days for a five week period. In addition, the students complete five days full-time in a service lab to get experience with general lab work as it occurs in a real work setting.

Evaluations are being developed by the faculty and will consist of performance rating scales and checklists based on objectives for the experience. There are no nationally accepted assessment instruments.

Qualifications for supervisors are that they be credentialed M.T. (A.S.C.P.), have at least a bachelor's degree and two years teaching experience.

The students pay regular tuition to the school and supervisor and centers do not receive any reimbursement for providing clinical experiences.

OCCUPATIONAL THERAPY

The American Occupational Therapy Association was the first allied medical field to become affiliated with the American Medical Association for accrediting school programs. A new essentials document was approved by both bodies in 1973 and all programs are presently submitting documents this year to indicate that they are in accord with the new essentials. The essentials require two three-month full-time clinical experiences in such areas as pediatrics, general medicine and surgery, etc. In addition, most schools require additional clinical experiences closely integrated with didactic work. These are generally part-time experiences of varying duration and time commitments and are termed pre-clinical, clerkships or practicums as opposed to the full-time field work experiences.

Evaluation of clinical experience utilizes an instrument devised and approved by the AOTA Council on Education. Completed by the clinical supervisor midway and again at the end of each experience, it is reviewed with the student and sent to the school for scoring. Such documentation of successful completion of student field work is required by AOTA in order to sit for the Certification Examination to become qualified to practice. (Only Florida, New York and Puerto Rico have passed licensure laws.) Students also complete a nationally approved report of the clinical experience.

Field work supervisors must be Registered Occupational Therapists with at least one year's experience. They are also expected to be active in the school's Council on Education, which is a component of the AOTA Council and elects representatives to that national body.

Some kind of accreditation of field work centers or supervisors has long been a hope of the AOTA and a number of years ago a pilot program was conducted. Manpower and financial requirements of such a program have prevented the Association from making this a requirement although it is felt that it would be most beneficial. Another pilot program under way through AOTA is a national computerized system of fieldwork placement. It is too soon to tell yet if this will be feasible or if it will meet the needs of schools, centers and students.

PHYSICAL THERAPY

A new essentials document has been approved by the House of Delegates of the American Physical Therapy Association but has failed to gain approval by the American Medical Association. A.P.T.A. is currently exploring aligning itself with another organization. The "current" essentials are considered outmoded and individual institutions generally require either more clinical experience or different types of experiences than called for in the essentials presently in effect.

An illustration of this point is provided by the requirements of the University of Illinois Physical Therapy Curriculum. Four five-week blocks of full-time clinical experience are required during the

senior year in addition to short-term experiences in the junior year. The clinical experiences for junior students consist of one morning per week and place emphasis on practicing specific skills that are being covered in classroom instruction. Senior experiences are also integrated with classroom instruction but are full-time blocks in various clinical areas of: general medicine and surgery, cardiopulmonary, rehabilitation and pediatrics.

Each physical therapy program has either developed their own evaluation tool for clinical experience or has adapted one from another school for their own use. One developed, piloted and evaluated by the University of Texas is used by Illinois and consists of a force-choice yes/no checklist. It is completed mid-way and at the end of each clinical experience by the supervisor. Students also complete the form as a self-evaluation and the school pays close attention to how closely the two evaluations coincide. Students also complete an evaluation of the clinical center. Dissatisfaction with the evaluation tool stems from the fact that it is based on the premise that the student has completed all didactic work before doing any clinical experience. Physical Therapy clinical supervisors also have to contend with completing several different kinds of evaluation instruments if they have students from more than one school.

Students pay regular tuition to the school while they are on their clinical experiences. The clinical centers and supervisors are not reimbursed by the school or students in any way.

SUMMARY AND CONCLUSIONS

At the outset of this paper it was pointed out that seeking to capture any essential feature of allied health professions is fraught with difficulties, much like grasping quicksilver. Elusiveness founded in fundamental differences is not to be denied, and this effort has not escaped unscathed. In an endeavor to make the problem more

manageable six allied health professions have been examined in greater detail, but the tapestry shows little more than a patch-work pattern. The authors have relied heavily on personal communication, since the pertinent references are few in number, or frequently are too old and too loose to withstand the weight of generalizations. Thus, the authors feel compelled to insert this caveat before proceeding further. What follows are a series of tentative conclusions which may prove relevant to planners of teacher education programs.

Allied health education programs display so much variation that only modest comparisions can be made among the six in this sample. Of the represented national associations three maintain affiliation with the AMA (medical records administration, medical technology, occupational therapy), one is seeking to disaffiliate (physical therapy), and two are otherwise affiliated (medical art, dietetics). Yet no significant differences can be detected in the nature of the profession's Essentials. Among the six professions, and even among the three AMA affiliates, significant differences in program design, academic and clinical requirements, duration of clinical experience, and the type of clinical site makes patterns difficult to discern. The authors conclude that this finding in no way reflects negatively on the quality of AMA affiliation, nor on the effectiveness of vitality of the national association or its membership. It does reflect the occupational differences in allied health professions. The authors further suggest that the review of clinical experience in allied health appears to be of limited value in informing teacher educators.

In general, specifications of clinical experience in allied health education stipulate duration but not the nature of such training. Careful delineation of professional performance expectations are lacking, a vacuum that is filled with stipulation of numbers of hours, days or weeks at the clinical site. This quantitative standard makes qualitative judgements problematic, and arises from lack of clear agreement on standards of professional competence.

Evaluations of student performance show an alarming lack of uniformity, raising serious question as to their validity as well. Except with occupational therapy, locally produced, unstandardized assessment instruments are frequently used to evaluate student clinical experience performance. Variations among institutions are thus encouraged, and this is not necessarily undesirable. What is disturbing is the prospect that, as a consequence, inconsistencies among institutions, and between institutions and their clinical sites, may never become the focus of program evaluation. This again reflects the lack of general intra-professional agreement on standards of entry-level competence. While certification mechanisms, including examinations, address the problem, current practice remains vulnerable to severe criticism on validity grounds. The growing movement toward state licensure in these allied health professions promises to permit application of more local standards, as is the case with teacher education. However, this practice has not made the teaching profession immune to the criticisms cited above, and many others as well. The authors do not anticipate a different outcome with state licensure in allied health.

Clinical experience in allied health is generally provided during the latter half of the undergraduate program. This practice of withholding even the most closely supervised clinical experience until relatively late in the educational program (which exceeds four years for some professions) is apparently based on the questionable assumption of transfer of training. That is, allied health education retains the "theory" first, "application" second mode, although evidence indicates that this is changing in differing degrees among the professions. (Traditional teacher education also fails this test.) The authors also agree that earlier access to the real-life working world would probably improve student career selection processes by permitting reality testing of what are frequently stereotypical views of their "chosen" profession. It would appear desirable for such clinical experience to be integrated into allied health education earlier

than is presently the case. However, since these programs are frequently offered as upper division programs (that is, admitting junior year students), earlier integration may be precluded unless substantial revisions in program design are effected.

Clinical supervisors are usually without special training or credential for this role. Apparently, securing adequate clinical sites to accommodate students takes high priority and remains a continuing difficulty for educational institutions. The current state of allied health professions education has not permitted directing attention to the issue of adequacy of personnel assigned as clinical supervisors. In fact, the authors find it difficult to anticipate satisfactorily dealing with this problem given the degree of articulation between didactic faculty and field personnel. As indicated above, student clinical performance expectations are frequently poorly defined and poorly evaluated. Obviously, this situation would need improvement before one could adequately attend to specifying performance requirements for clinical supervisors.

Allied health professions education displays clinical experiences that vary widely in nature, duration, and intensity. Among the sample professions the authors have identified clinical experiences that range from closely supervised, short duration part-time observation (usually in conjunction with didactic instruction on campus) to full-time, on-the-job performance in real-life settings. These experiences may extend from a few hours a week early in the program to a culminating affiliation (clerkship, internship) lasting three to six months at locations far removed from the institution. These latter experiences may call for the student to live and work in a location in a different city or even a different state. Coordination of these experiences poses a serious logistical problem to the academic institution and helps explain some of the deficiencies in inter-institutional consistency and evaluation cited above. In all fairness it should be noted that the use of distant clinical sites is often necessitated by their scarcity and frequently justified by the singular character of a site that may

provide highly specialized care. It is unlikely that this would prove true in teacher education, although the relatively wide distribution of students in the field may be necessary to accomodate the (usually) larger numbers of students in these programs.

Financial arrangements with clinical sites appear to be undergoing important changes, although the pattern is not consistent for all professions. Highly desired clinical sites are expressing unwillingness to absorb the costs associated with providing learning experiences and supervisory personnel. In some instances clinical sites are severely reducing the number of students they will accept, or, in more extreme cases, withdrawing altogether from their affiliation. However, the more typical changes are in the direction of reimbursements to the clinical site, which may take the form of fees charged to the academic institution, providing adjunct faculty appointment or selected in-kind services to the clinical sites. While there is no extensive evidence to support firm conclusions at this juncture, projecting the consistency of current trends and economic conditions, it seems likely that the academic institutions will have to anticipate real costs associated with clinical education. How the academic institutions will cope with these new demands on their already seriously thinning resources cannot be predicted. It is difficult to imagine that programs in allied health professions could continue without extensive use of clinical sites.

Change--rapid change--is the current hallmark of allied health professions education. This investigation reflects the present state of a field entirely in flux. In fact, examination of allied health may call for application of a modification of the physicist's "uncertainty principle," the rule which states it is impossible to simultaneously know with equal precision the position and the velocity of a sub-atomic particle. If the authors have failed to pinpoint the position of allied health professions education, it is their hope that they have succeeded in adequately depicting its speed.

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Experience-Based Learning in Business Education

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EDUCATION FOR COMPETENCE

Recent years have witnessed a dramatic increase in accountability in every area of education. Educational systems have responded in many ways to meet the demands for accountability. They have had varying degrees of success. One response has been the use of competency-based education programs. Within business education there has also been an increase in the use of experience-based learning environments. Experience-based learning has proven to be a significant addition to the teaching methods used in business schools. At the same time, it has demonstrated its practical value in supporting competency-based education programs. Its success is due, in large measure, to the use of action environments as the setting for learning. By using action settings the problem of transferability of knowledge is significantly diminished.

In this paper we will define and review experience-based learning in terms of factors accounting for its emergence, the role requirements of the participants and the problems and opportunities presented by this relatively new methodology.

Business schools in the United States have four readily identifiable goals: (1) the preparation of students for careers in business; (2) offering services to the business community; (3) the generation of new knowledge about business; and (4) the preparation of teachers of business. While the first three goals are common to most schools the preparation of teachers is usually restricted to those schools with doctoral programs.

For most schools, the objective of educating for competence in business is a matter of providing specialized education set in the broadest possible framework. This approach is intended to provide first job capability and the skills and perspective for life-long learning that is essential for developing and managing a long-range career. To achieve these goals two basic decisions are necessary: WHAT SHALL BE TAUGHT and HOW SHALL IT BE TAUGHT? The first is a

curriculum decision and the second involves choosing a delivery system.

The curriculum decision, or what shall be taught, is fairly well prescribed through standards provided by an accrediting agency, the American Association of Collegiate Schools of Business (AACSB). These standards require that every student be exposed to each major area of business. Some latitude in subject matter proportions is acceptable and additional latitude is available for designing the specialized segments of a program. While these standards permit some distinction between programs at different schools, the fundamental curriculum requirements are the same for all accredited schools.

The general education of the business student is found in courses devoted to the study of the business organization as a totality. In these courses students acquire the perspective of the heads of organizations.

Speciality education is provided to students in the form of courses that deal with specific sub-systems of business. Thus, students will specialize in marketing, finance, accounting, or other fields. Closely related to the acquisition of specialized knowledge is the objective of training students for their first job. The more specialized a student's program, the more likelihood that additional emphasis will be given to preparation for the first job. This notion is reinforced by the certification requirements available in some specialties such as, for example, the Certified Public Accountant.

Attempts to provide the student with the capability for continuous life-long learning are not so clearly identifiable in the curriculum. In one sense this capability is an indirect outcome of the student's participation in the educational program of the school. To the extent that a student is attentive to the demands of a given program (such as choosing among various electives or teaching methods) and participates in the broadest range of educational opportunities offered, the acquisition of life-long learning capability is a by-product.

While the basic curriculum is essentially the same for all business schools, it is the teaching or the delivery style that actually provides

substance and meaning. Different styles or methods are often the means for translating the objective of business education into reality. For most schools, the delivery system is designed around lectures, seminars and the case method. The lecture largely involves students in a passive role and is designed to transmit information from an expert to the student. As such, it is primarily instructor--rather than student--centered and develops the cognitive domain. The seminar is more active, but the primary relationship is between the instructor as expert and the student as a recipient of information. The case method was initiated and developed by the Harvard Graduate School of Business. Its use is based on the idea that no two situations are identical and that exposure to descriptions of real business situations provides the opportunity to practice identifying the uniqueness of a given situation. With repeated exposure students will develop skills to identify problems and propose defensible, responsible and effective courses of action.[1] The case method is somewhat more effective in creating student responsbility for learning. However, it remains largely instructor centered, remote from actual environments and inattentive to problems of implementation.

In recent years experience-based learning has been added to the delivery system of business schools. As a device for implementing the educational objective previously stated, its proponents would suggest that it improves the ability to provide general and special education while adding substantially to the capability of providing training for the first job. In addition, experience-based learning has the potential for directly satisfying the objective of life-long learning.

The use of experience-based learning as a major element of business school delivery systems has emerged from a complex set of factors. One of the major factors in this emergence has been the quest for relevance. Students and faculty continually have sought ways to bridge the gap between the world of actual practice and academic study. In particular there was a need for students to develop skills at implementing solutions which the traditional academic setting could not provide as readily as

experience-based learning. Further, skills were needed to unlearn or reintegrate certain knowledge as the pace of change accelerated rapidly. It was also important for students to be able to act from a knowledge base and not only add to the knowledge base. Using actual problems of existing business organizations as the vehicle for learning helped to build this bridge at the same time that business was strengthening its relationships with collegiate schools of business.

EXPERIENCED-BASED LEARNING--WHAT IS IT?

A simplistic notion of experience-based learning is expressed in the general phrase "learning by doing." A more specific definition that captures the student-centered, action-oriented and on-going nature of experience-based learning is provided by Hoover:[2]

> Experiential learning exists when a personally responsible participant(s) cognitively, affectively and behaviorally processes knowledge, skills, and/or attitudes in a learning situation characterized by a high level of active involvement.

It is clear from this definition that an action learning environment is readily created by involving individuals or small groups of students in actual problems of business organizations. With the guidance of faculty to insure the maintenance of the process, the whole person of the learner is active and open to learning. As such, there is a learning process in which the learner derives his own meanings, understandings, categorizations and generalizations from his own direct experiences. He takes what he knows and elaborates on it, connects it to real situations and adapts it to integrate the realities of the new experience. He learns so that he may act and react toward accomplishing some specific tasks. He develops the ability to integrate his experience with his knowledge so that knowledge more accurately reflects reality. He learns to reinterpret existing facts and beliefs so as to create a more useful, applicable framework from which to act. All of these activities are characterized by a high level of student initiative.

One way to view the process by which these learnings occur can be found in a model of experiential learning developed by Kolb, Rubin and McIntyre.[3] In this model, the process of learning through experience is seen as a repetitive cycle in which the learner first engages in some concrete experience. This is followed by reflective observations on that experience from which the learner is able to derive abstract concepts and generalizations. Once formed, these conceptualizations lead to action experiments which will test their implications. The experiments create new actions producing new concrete experiences which initiate the cycle again.

This model has been found to be useful for faculty, students and members of the host organization in designing, conducting and evaluating experience-based learning. In the design of such learning, it is important to provide opportunities for students to exercise each phase of the experiential model. For example, we have found a tendency on the part of students to underemphasize the significance of reflective observation to the process of learning from experience. This tendency can be resisted, in part, by requiring periods during which the student steps back from the immediacy of the problems and is led to examine his experiences. In the conduct phase the participants need to be continually alert to seeming blocks to action and learning that are based on participants being engaged in different parts of the learning cycle. Thus a student with a preference for reflection may create frustrations for another student whose preference is for action and experimentation. Finally, evaluation needs to proceed continuously, lest students lose sight of significant learnings. However, it is important to have a definite point of closure for the experience so that students retain the confidence and the curiosity they initially brought to the project. Clarity about closure will help to avoid potential frustration and loss of motivation. Each of these aspects of the process of experience-based learning is examined more fully in later sections.

In summary, it is clear that experience-based learning is a

methodology that stands in sharp contrast to the methodologies of lectures, seminars, and cases. The focus of learning is on the process of learning as well as the content of learning. Experience-based learning is significantly more student-centered requiring the student to derive his own meanings from his direct experience. The concrete experiences are seen as opportunities for students to reorder and reintegrate a base of knowledge as well as adding to knowledge. The student is continually involved in a process of learning how to learn from experience.

FORMS OF EXPERIENCE-BASED LEARNING

Our discussion has established that experience-based learning utilizes a concrete, action environment along with a model for learning that enables students to responsibly manage their own learning.

There are many settings that qualify as experience-based learning environments and we will briefly review six: INTERNSHIPS, CONSULTANCY, CLASSROOM ACTIVITY, CONTRACT RESEARCH, INDEPENDENT STUDY and SIMULATION.

INTERNSHIPS. Internships involve students being assigned to specific roles within an organization, usually a business. The student normally will work at the host organization's location in tasks specific to his field of study. The experience is designed to expose the student to the work of his field rather than to the study of his field. Normally it is not possible to specify the content learning in advance other than to say it pertains to a particular functional area such as commercial banking.

CONSULTANCY. Here students act to provide advice to organizations on the solution to a current problem. Often the consultancy will include assistance in the implementation of recommendations. Normally, teams of students will make up the consulting group and they operate under the guidance of a faculty member. Frequently the student consultants are prepared to provide advice on any type of problem faced by an organization

and do not limit their efforts to a single functional area. As a result the content of learning cannot be specified in advance.

CLASSROOM ACTIVITY. Within the context of any given course, experiences can be created that are a form of experience-based learning. Although these experiences are somewhat more structured regarding specific content all the elements of experience-based learning exist. Courses in inter-personal relations often proceed by using instructor-created situations that serve as the basis for reflection, abstract conceptualization and generation of new behaviors. While experience-based learning is very common in the study of inter-personal relations it is also quite useful in other areas. For example, students in a consumer behavior course may be asked to develop an advertising campaign for a "client" and in the process clarify some understandings of the conceptual-reality knowledge base appropriate for this task. Usually the specific area of content learning can be specified in advance because of instructor influence on the choice of the specific classroom activity.

CONTRACT RESEARCH AND DEVELOPMENT. In this form of experience-based learning students serve as researchers working with faculty and members of organizations on research and development questions such as identifying student learning styles or training of minority entrepreneurs. Due to the applied nature of the research it is a relatively easy matter to specify the broad outline of content learning in advance.

INDEPENDENT STUDY. As a distinct form of experience-based learning, independent study has many of the same characteristics as the consultancy and classroom activity forms previously described. The major difference is that the initiative lies with the students to establish the setting and learning content goals. Clearly this form of experience-based learning has the added potential of using the model for experiential learning as a guide to learn how to conduct applied research.

SIMULATION. A simulation is the creation of an environment that has many of the properties of the actual environment. Because it is an abstraction, the major elements of the actual systems are retained for study while minor elements are eliminated. Thus a simulation of the operations of a multi-firm industry allows teams of students to "manage" the firms and compress months and even years of experience into a few weeks. Content learning is more predictable where the level of abstraction is great and less predictable as the simulation becomes more complex.

In order to develop some idea of the extent to which experience-based learning is used in business education the authors recently reviewed the business catalogs provided by forty major universities and colleges. In our search we were attempting to identify specific activities whose major, if not exclusive, focus was on experience-based learnings. Fifty percent of the schools met this criterion and provided some type of experience-based learning. The authors suggest that sixty percent is a more realistic figure because it was not always possible to determine if certain courses were utilizing experience-based learning such as simulation or role playing.

This section has provided a brief description of the major forms of experience-based learning and provided data to suggest that it is being used rather extensively in business education. We now turn to discussions of the roles and characteristics of the major participants in experience-based learning environments.

FIELD EXPERIENCES--THE SETTING AND THE TASK

Among the different forms of experience-based learning, several lead the student into direct contact and involvement with an actual business organization. The focus in the remainder of this paper is on learning experiences, especially consultancy projects and internships as described above.

Field experiences are generally conceived as opportunities for

students to gain direct exposure to a business organization with all of its complexities and uncertainties and to apply their knowledge and skills to actual business situations. Typically, students, individually or in small teams, join with the organization for a certain period as part-time members or consultants and work on a specified project or problem area within the company. They assume an active, initiating, responsible role, working with practitioners in their usual organizational roles, while maintaining contact with faculty members as facilitators and managers of the learning environment. Thus, the student undertakes two sets of objectives: those that relate directly to completion of the project or assignment and those that relate to his own learning and development.

There are three important implications in this conception of the learning process. First, this is a student-centered learning process in that the initiative and responsibility for the learning process is in the hands of the student. While the host organization provides the general problem area or task assignment and the overall learning environment, the student must provide much of his own initiative and direction in carrying it out. In the classroom it is the instructor who establishes objectives, gives assignments and directions, evaluates progress and performance, and carefully manages the learning environment. In contrast, experience-based learning requires the student to provide much of this for himself. He must specify or negotiate the objectives, design and manage his own activities, evaluate his own progress, and discover and relate to the complex environment he finds in the organization. Members of the host organization and the faculty can facilitate and support the learning process, but the initiative and managing of the process is centered with the student.

A second implication is related to the role of the host practitioner. It is assumed that his primary task in this learning process is to retain his usual role in the organization, relating to the student/learner as manager, as information resource, as facilitator and supporter of the task, and as evaluator of task performance. It is important to

emphasize this role, since in our experience, most organization members are likely to confuse experience-based learning with their understanding of traditional education. For example, they may be unaware of the student-centeredness of experience-based learning. They may also be concerned about their own lack of credentials for teaching. Because they have these concerns, they may try to create a pseudo instructor-centered learning environment. The host must understand that it is the work setting with all of its complexities to which the student is seeking exposure. Attempts to provide different standards for the student than those that are applied to others in the organization will only lessen and not heighten the potential for learning. If the student thinks that he is receiving different treatment, that he is being sheltered from the complete problem there is every likelihood that the value of the experience will be severely diminished. It is only when the student has an honest exposure to the work setting that the full potential of experience-based learning will be realized.

A third key implication of this conception of the learning process is that the student is <u>not</u> assumed to have all the knowledge and skills necessary to accomplish the task prior to undertaking it. Students are assumed to be capable, resourceful, and motivated but not expert. We have found, for example, that students with only minimal knowledge of concepts of accounting were able to design and install a complex accounting system in a small firm where only the most basic bookkeeping had been done before. During the process, the students learned and retained as much or more understanding of accounting than might be expected from two or more semesters of classwork. The "need to know" in order to complete a project, in conjunction with the "realness" of the learning environment, can stimulate a great deal of motivation for learning and produces an internalization of what is learned that cannot be matched by more remote learning environments.

In selecting projects or assignments for field experiences, four key characteristics have been found to be crucial for a successful learning environment.[4]

1. The project or assignment to be given to the student must be seen as potentially important to the organization. The host organization must expect that it will be significantly aided by the solutions to problems or completions of projects developed by the students. Where hosts have agreed to student participation as a form of community service rather than with an expectation of receiving assistance on a significant problem, learning is diminished and completion of the project is frequently frustrated.

2. Access to and the time of relevant members of the host organization can and will be available to the students. It is important to make it clear that successful work by the student will demand the time and support of host personnel.

3. The host organization is willing to make available to the students all of the data and information necessary to work on the problem area. Frequently this will require some more or less formalized agreement between the host, the students and the faculty about the use of proprietary information.

4. The nature of the project or assignment will lend itself to periodic progress checks and evaluations prior to a final outcome. The opportunity for students to be able to see progress along the way to a final goal has a significant motivating value. It also provides opportunities for faculty members to use these intermediate checkpoints for helping students assess their own learning progress. In addition, the attainment of intermediate goals will provide reinforcement and motivation to the host organization.

In this section we have discussed the basic conception of experience-based learning and some important aspects to be considered in order to maximize the learning potential. Beyond these are some significant issues involving the student's relationship with the host organization which are discussed in the following section.

RELATIONSHIPS WITH HOST PRACTITIONER/ORGANIZATION

Establishing clear, effective, communicative relationships between students and the host practitioner is perhaps the most significant factor for a successful project. It is also an important area of potential learning for the student. The relative success of a given project, in terms of both its usefulness to the host organization and its effectiveness as a learning experience for the student, can frequently be traced back to the relative quality of this relationship as it develops.

The first meeting or series of meetings between the students and the host practitioner are particularly important, having four significant outcomes: an UNDERSTANDING OF THE OVERALL OPERATION of the organization, a CLARIFICATION of the general nature and objectives of the project, a reciprocal SHARING OF EXPECTATION between students and the host practitioners, and the establishment of some short-term, intermediate GOALS AND OBJECTIVES.

The overview of organizational operations and personnel provides the students with a basic context in which to view their own projects and some initial direction toward sources of information and observation. It also provides the basis for understanding the purposes and objectives of their projects in terms of what it might do for the host organization. In clarifying the nature of the project, it is stressed that a critical part of the students learning experience is the identification of specific problems and objectives. Therefore, it is important that the original description of the project leave considerable room for discovery and creative thought in developing specific problem

definitions and objectives. Occasionally, the initial conception of the project is found by the students not to be appropriate to the basic problem for which solution is sought. However, enough mutual understanding of the focus of the project must be established to create confidence that its general direction is understood.

Of particular importance is the initial sharing of expectations between students and the host practitioner. The quality of emerging relationship between them is frequently determined by the extent and accuracy of this exchange. The student begins to develop an understanding of what is expected of him, his responsibilities, and expected standards of performance and behavior as reflected in the culture and climate of the organization. The host practitioner develops an understanding of his own role, the student-centeredness of this learning process, an awareness and tolerance of the student perspective, and the importance of the practitioner's willingness to provide and interpret information. (For example, the internal politics and various departmental perspectives that surround the project may be very important pieces of information.) Of particular importance are expectations around time and timing: how much time the students can commit to the project, the amount of time host personnel can make available and when, the timing of deadlines for completion of segments of the project, and so on. The extent to which these expectations are adaquately expressed and understood can frequently be identified as a significant contribution to the success or failure of the project and the learning process.

As indicated earlier, the establishment of intermediate objectives and checkpoints are important to an effective experience. Generally, a first scheduled objective is the development and presentation of the students' diagnosis, problem definition, and projection of activities and objectives. Typically, this would contain a further schedule of intermediate objectives and checkpoints. Setting the first objective is important, both for getting started on the project and for establishing a pace for the whole effort.

Whether or not the outcomes of these initial meetings are formalized

into a written "contract" will vary from one situation to another. However, it has been found to be critical to all parties that each understands the "contractual" nature of their agreement. Whenever it is reasonable, some form of written agreement is found to be beneficial.

During the conduct of the project, frequent communications between the students and the host manager are very important. The pace and relative progress of the project, as well as its direction and effectiveness, may depend on it. In conjunction with this process, we have found three aspects that are POTENTIAL PROBLEM AREAS.

First, it is important periodically to review the overall project and objectives. Frequently, as a result of work on the project, it needs to be redefined, objectives need to be altered, or time schedules need to be reviewed. When projects are complex, we have found a tendency on the part of students to get over-focused on some part of the project and to lose sight of or under-emphasize others. Priorities for both students and the host may also change. In some cases the project may need to be expanded or pared down.

A second area, which can be facilitated by periodic review, is attention to both project or task objectives and the students' learning objectives. These two sets of objectives may frequently appear to be in conflict with each other. This conflict needs to be carefully managed and needs the support of both faculty and host. Without their guidance the student is likely to emphasize one at the cost of the other.

The third aspect deserving special attention is the importance of periodic performance evaluation mentioned earlier. Such evaluations provide perspective for the student and restimulate motivation for all parties involved. The experience with professional, operational standards of performance is also an important part of the student's learning experience.

As the project approaches completion, it is important that the original and emergent objectives be reviewed. If, as frequently happens,

the students have completed some but not all of the objectives, it is important (certainly to the host organization, but also to the students' learning experience) that they retain responsibility for all of them, at least for recommendation for directions and actions to be taken.

The quality and success of the project and learning experiences are clearly based on the development and maintenance of effective relationships between students and host practitioners. There are several ways in which the faculty member can also contribute significantly to this process.

ROLE OF THE FACULTY

The faculty member has the major role in contacting potential host organizations and arranging for projects. In this process it is the faculty who provide the basic concepts and framework for the conduct of experience-based learning projects for both students and host practitioners. As indicated earlier, it is also the responsibility of the faculty to select projects and make connections between learning opportunities and student needs and interests, involving students in the choice wherever appropriate.

All too often, faculty tend to see the extent of their involvement as limited to the design and initiation of the project, being available as knowledge resources, and providing final evaluation. We consider the role of the faculty during the conduct of the project to be much more extensive and critical to its success. Four additional key roles can be identified:

1. Help students clarify choices and alternatives as they develop and carry out their projects.
2. Provide support and reinforcement for developing and maintaining good relationships within the host organization.

3. Provide the major support for attending to and supporting the students' own learning objectives in addition to the task objectives.

4. Assist students with the articulation and generalization of the learning drawn from the experience as a means for transferring them beyond the specific situation in which they occur.

Earlier we discussed two kinds of learning objectives which students undertake: those that relate to accomplishing the project and those that relate to the students' own learning. The first two roles identified for faculty provide support for the students efforts to maintain an effective learning environment for conducting the project. The second two faculty roles help the student examine his own experience and generalize from it, thereby focusing on his own learning needs.

In our experience the effective performance of these roles is critical to the translation of an experience into enriched learning and competence development which will allow students to organize and transfer (what they have learned) to new and changing circumstances. We would contend that it is this added dimension to the experience that makes it a significant learning process beyond the experience of work. Without the stimulus and guidance of the faculty, students are likely to be enticed by the excitement and immediacy of the project itself and to lose much of the potential which experience-based learning can provide.

Of course, the faculty has an important role in the continuing and final evaluation of the student's performance and learning. It is to this continuing process of evaluation and feedback that we turn next.

THE EVALUATION PROCESS

Some advocates of experience-based learning in business education take the position that any direct experience is, in and of itself, learningful. As a result the goal is to locate and place students in active, exciting, environments. If these environments are related to the students interests, however loosely defined, the experience will have positive learnings and evaluation is not essential. The authors do not agree with this position. We have found that experience-based learning can provide more meaningful learning if evaluation is a conscious, continuous process. When it is not, the learning is often temporary, unrelated to previous learning and does not provide the student with any capability toward coping with situations that are beyond a given experience.

The evaluation process in experience-based learning is conceptually clear but operationally obscure by virtue of a number of characteristics of experiental education. Experiential education is student-centered, impacts the cognitive, affective and behavioral dimensions simultaneously and involves multiple sources of inputs about performance and learning. We will discuss these factors as they affect the roles of students, faculty and host organization members.

The student-centered focus of experience-based learning has repeatedly been identified as a major distinguishing feature of experiential education. Its significance lies in the fact that initiatives for learning rest with the student. Other environmental factors are sources and resources for the student. The student must accept the responsibility for learning by being proactive in the specification of learning objectives and in their evaluation. This responsibility cannot be delegated since each student comes to experiential learning as a unique person. Educational background, social and cultural heritage, learning styles and personality traits are all combined in ways that establish this uniqueness.

In carrying out this responsibility and in managing his uniqueness,

the student is confronted by a dramatic role change. From a passive learner whose goals are largely prescribed, the student must move to active learning including establishing his own goals. The student is asked to take a major role in defining his activity and becomes the primary source for his own evaluative information.

At the same time that this new role is being adopted, the student is asked to consider three major types of learning: cognitive, affective and behavioral. While the cognitive may be relatively familiar, both the affective and behavioral are likely to be new and different learning areas. Finally, the student's role is made more complex by the fact that as he assumes the major initiatives for learning in three dimensions simultaneously, he will be receiving information about his performance from multiple sources. He receives feedback from the faculty member, participants in the host organization, the task itself, himself, and perhaps, feedback from peers.

With these characteristics of experiential education, the student's role is to be proactive and inquisitive from the outset. He must keep his goals before him and be attentive to the information he receives. He must learn to use every resource in the environment to process this information to produce new meanings.

The faculty member is also involved in a role change. From source of information and primary evaluator, the faculty member shifts to the role of resource person, facilitator and co-learner. In this role the faculty member is involved from the outset in helping students define clear and manageable objectives and evaluation criteria. In addition to being a source of information, the faculty member's role will most often require an ability to help students make choices between alternative forms of evaluation and expressions of learning.[5]

As a facilitator, the faculty member shares with the student a responsibility to provide opportunities for evaluation. Perhaps most important, the faculty member can aid in the evaluation process by sharing his own learning. The experiential learning situation is going to provide significant opportunities for faculty learning and sharing this

learning will lend substance to the entire evaluation process.

The host also participates in the evaluation process with a focus on the student's performance of the task and the quality of the outcomes. Thus the host will be involved in helping the student define evaluation criteria and make choices among alternative forms of evaluation. However the host's major contribution lies in the kind of feedback he provides to students. The feedback should be similar to that provided to any employee or consultant assigned to the task given the special circumstances of the student in relation to the organization. The student is seeking to participate in the reality of the work situation, and the host can be most helpful by maintaining his own normal standards of performance.

In summary, the development of skills for pro-action, self-direction and self-management requires that a person establish his own normal standards of performance. Feedback and evaluations by others are extremely useful and important in testing self-evaluations against broader realities, but these are primarily additional data to supplement self-assessment.

PROBLEMS AND OPPORTUNITIES

From the foregoing discussion it can be seen that field experiences for students of business administration are conceived as a learning process in which the student works in a host organization, assuming roles and responsibilities which are a close parallel to those which he will have when he enters the professional world. The host organization is seen as an environment for experience and learning from which the student derives generalizable and transferable learnings and competencies. Acting in their usual roles, practitioners are sources of experience for the student but not instructors or trainers. They serve the students' learning most effectively by maintaining their own patterns of behavior, expectations, and performance standards while facilitating and supporting the student's task activities and achievement.

While some host practitioners, organizations, or projects may be more or less effective than others as learning environments, no specialized role or training is assumed. On the other hand, faculty are assumed to have a role quite different from their usual ones. They have a major role in selecting and developing the learning environments and in matching them with student needs and interests. During the conduct of the field experience their role becomes more facilitating and supportive toward students, leaving the initiative, direction, and management of the learning process in the hands of the student.

Throughout the paper, we have attempted to identify some of the potential problems and difficulties frequently encountered in conducting experience-based learning. Among them, we have explored problems which stem from lack of understanding of the basic conception of experience-based learning and its process, such as misunderstandings of the roles of students, host practitioners, and faculty. Included were such problems as those that derive from unshared or contradictory expectations, ineffective or uncommunicative relationships, and the lack of adequate and timely feedback and evaluation during the field experience.

For anyone contemplating introduction or expansion of field-based learning programs, there are three problem areas that deserve elaboration: STUDENT RESISTANCE, FACULTY RESISTANCE, and the EFFICIENCY OF TIME AND EFFORT REQUIRED.

First, experience-based learning requires the student to assume a role in which he accepts many new responsibilities for his own learning and activities. He needs to assume the initiative and direction for his own activities and the responsibility for accomplishing tasks. And he undertakes all this in an environment full of complexities and uncertainties and without the usual structure of the classroom on which he has learned to depend. We have found that, while individual students tend to approach any learning situation with very different styles, most of them are hesitant if not actively resistant

to this kind of role, at least the first time they encounter it. The faculty are particularly important to overcoming this student resistance. The amount of excitement and enthusiasm they are able to convey and maintain from the beginning has been found to be a central factor. Their ability to balance active psychological support and resourcefulness with a firm set of expectations and challanges to the students undertaking their roles has proven to be a most significant factor. Early successes and reports of student experiences can help to overcome students' concerns. But it is important that those who introduce field experiences as a learning vehicle can expect to encounter and deal with resistance from students.

One key source of student resistance frequently stems from an inadequate conceptualization and understanding of the research and decision making skills associated with the processes of problem identification, generating alternative solutions, evaluation of alternatives and implementation of chosen actions. Generally, these concepts and skills are assumed to have been acquired in previous coursework. We have found that this assumption is likely to be unwarranted. Prior to the students entry into the field experience, faculty need to renew or establish student's confidence in their capabilities to carry out these activities successfully.

A second source of difficulty and resistance is likely to come from faculty. Faculty are also likely to find it difficult to adopt the new roles called for in experience-based learning. Where they are used to structuring, directing, and controlling the learning process, they will find themselves in a much more reactive, facilitating role. Some faculty also find it difficult to accept the apparent unstructuredness and the uncertainties of the learning process, fearing that learning will not take place or that they need to assume much more of the direction of the student's activities. Used to being in the role of expert, they may find themselves frequently engaged with the students as co-learners. For some faculty this represents a loss of self concept and a devaluing or what they feel they can do best.

While early successes and feedback from students are likely to overcome this to some extent, the faculty may find that, while they are learning to be effective in this new role, it is a frustrating process, with unpredictable events and outcomes, and may require more time and effort than they have typically expected.

This leads to the third problem area: the relative efficiency of experience-based learning as a methodology. The amount of time and effort required to arrange, initiate, facilitate, and evaluate field-experiences for students is frequently quite large, especially considering that each project may involve only one to five or six students. This may make the methodology seem quite inefficient. In addition, the projects will frequently seem to take an inordinate amount of time for the students, partly as a result of their own eagerness and partly in order to obtain a sufficient understanding of the organization and their tasks. Proponents of experience-based learning will counter this concern with two kinds of arguments. First, they contend that the types and quality of learnings for students are immediately relevant, pervasive, and usefully retained. Secondly, they believe that experience-based learning has the potential for becoming quite efficient as more is learned about designing and conducting this kind of learning process. For example, we have found that as students gain experience with field projects and internships, they learn to manage their project negotiations and time involvements much more effectively. The same has been found true for faculty, except that their time investments continue to be less structured and predictable than is usually true for more faculty-centered learning processes. However, the question of relative efficiency remains unanswered. There has been very little research on the conduct of experiential learning, and until it is accomplished, this question among several others remains a matter of alternative rhetorics.

Beyond and in spite of the potential problems that may be encountered in the use of experience-based learning, there are many potential benefits to be derived. Many of these are directed toward

the students' ability to learn and develop relevant and useable competencies, as indicated throughout this paper. Some of the benefits extend beyond the student into the business and community environment.

As a conclusion to this paper we will present some of the benefits that can be expected beyond the creation of a significant alternative learning option. Our discussion is intended to be brief, and hopefully provocative, and no attempt is made to substantiate the proposed benefits.[6]

There is little doubt that the major benefits of experience-based learning accrue to the student. In addition to the benefits of becoming an active, individually responsible learner who is developing significant task competencies, experience-based learning provides opportunities for informed career choices, participation in solving significant community problems and development of an increased sense of citizenship. Career choice is significantly aided by participation in actual problem solving. In direct contact with a supposed career interest, the student is able to experience the joys, frustrations and sense of achievement associated with problem solving activities. From the data he will generate, the student may seek additional exposure to a given field or examine alternatives. In either case the selection of job opportunities is a decision based on first-hand knowledge.

Experiential learning has the capacity of adding relevance to formal education and blurring, if not eliminating, the seeming disassociation between education and work. Students are able to see the significance of knowledge as an aid to problem solving and the importance of acquiring, retaining and developing learning skills for career development.

If we consider citizenship as participation in community affairs, then experience-based learning permits students to experience citizenship. In this exercise, students are able to see and influence the affairs of institutions while observing the effects of institutions on individuals. The ability to identify and help direct institutional

change can instill confidence in the idea that institutions exist to serve and may well promote an informed, participative citizenry.

Faculty can derive many benefits from their involvement in experiential programs. For most faculty, the role requirements are unfamiliar and call for new or revised attitudes and behaviors. Such changes are a source of continued personal and professional development. One attitude that is usually affected holds that quality education can be accomplished by manipulating inputs to the educational process including course or program content and educational backgrounds of learners. The acceptance of a student-centered process which involves actual problems external to the educational institution necessitates a shift in focus to the needs and capabilities of others. These needs can only be satisfied by considering final outcomes. This change in attitude of faculty is building a foundation that can produce fundamental changes in the conduct of educational institutions.

Sexton and Ungerer[7] have provided a representative list of the benefits that host organizations derive from their participation in experience-based learning:

1. An immediate source of temporary manpower.
2. Screening and recruitment of future employees.
3. Access to skills and knowledge of academic institutions.
4. Opportunities for supervisors, as well as interns, to learn ways to manage work and learning for themselves.
5. Opportunitites to examine the learning and teaching dimensions of their own organizations.
6. Access to thoughts and attitudes of the young (ventilation).
7. Invigoration of permanent staff through the presence of students.
8. Fostering creditable witnesses (interns and faculty) about the nature and worth of the organization in promoting the public interest.

To date very little systematic research has been done to substantiate the claims of benefits available from the use of experience-based learning. In large measure, the lack of research is due to the relative infancy of this form of learning. This, of course, precludes the possibility of studying any long-term effects. But it also means that the people involved in experiential learning may not be prepared or find it necessary to conduct extensive research on its current and short-term effects. There is a significant amount of support provided by national leaders in every area to establish the short-term credibility of experience-based learning. If it is to be sustained and prosper it requires systematic and extended research.

Footnotes

[1]The Bulletin of the Harvard Graduate School of Business 1972-73. In this bulletin it is stated that a master's student will be confronted with close to a thousand cases in two years of study.

[2]Hoover, J. D., "Experiential Learning: Conceptualization and Definition," Proceedings of the Southwest Division of the Academy of Management, March 1974, p. 16.

[3]Kolb, D. A., Rubin, I, & McIntyre, J., Organizational Psychology: An Experiential Approach. Englewood Cliffs, N.J.: Prentice-Hall, 1, 1971.

[4]A similar list of characteristics is proposed in Chervany and Heinen, "The Structure of a Student Project Course," Decision Sciences, 1975, 6, 174-183.

[5]At this point it is appropriate to note that the Educational Testing Service has established a project for the Cooperative Assessment of Experiential Learning (CAEL). This one-year-old project has produced a number of publications outlining the different forms that can be used to assess experiential learning. For example, CAEL Working Paper No. 1, "Current Practices in the Assessment of Experiential Learning." Princeton, New Jersey: Educational Testing Service, 1975.

[6]The authors have recently reviewed two publications that address the question of what benefits are possible from using experience-based learning. The first paper is in the form of a proposal to integrate educational and community resources into a more learningful and more efficient system for educating business undergraduates. The second is a publication prepared by the ERIC Clearinghouse on Higher Education. See Dodson, G. L., Jr., "Experiential Learning Via Problem Solving and Consulting With Businesses--Who Benefits?" Mimeo. East Texas State University, Texarkana, Texas, 1975. Also see Sexton, R. F., and Ungerer, R. A., Rationales for Experiential Education, ERIC/Higher Education Research Report No. 3, Washington, D.C.: American Association of Higher Education, 1975.

[7]Sexton, R. F., & Ungerer, R. A. (Note 6).

Clinical Practice and Nursing Education

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The task of preparing professional nurses for effective practice in an increasingly complex health care delivery system presents a continuing challenge to nursing educators. Clinical competence cannot be distinguished from cognitive competence, making opportunities for actual decision making and application of knowledge the critical components in the education of nurses. Modern educational technology has had a significant impact on the preparation of all health workers with multi-media, including simulation models and computer assisted instruction, being in common usage. Nursing faculty are among the forerunners in developing nontraditional instructional methods, but alternative learning systems cannot replace the absolute necessity for learner experiences in the real world.

Fitting those learners into health care settings has become more complicated in recent years, primarily due to the proliferation of community college, two-year associate degree nursing programs; an increase in practical nursing and baccalaureate programs and enrollments; and more intricate institutional complexities, with increased numbers-and kinds-of other health workers. Nursing schools find themselves competing for available patient care experiences--especially in hospitals, since practical, technical, and professional nurses are all trained to provide nursing care for persons during acute or episodic illness. Graduates of the two-year programs are primarily prepared for technical practice in hospital-type settings, while baccalaureate nursing programs prepare individuals for beginning professional level practice in *any* health care setting, and provide a broad foundation for graduate study and leadership. Graduates of both types of programs are eligible to take the state licensing examinations to become registered nurses. A few three-year hospital diploma schools are still in existence, providing another source of R.N.'s.

It is essential for students in baccalaureate programs to have actual client experiences--not just in hospitals, but in the home and

numerous community settings. Obtaining such learning experiences poses additional problems, including the fact that community health agencies often do not see teaching as a primary function. In addition, they are not equipped for, or accustomed to, coping with large numbers of students.

This paper presents my views of the present status of clinical practice for undergraduate nursing students in baccalaureate programs, including pertinent variables affecting the provision of quality experience: namely, the nursing service-nursing education gap; a brief historical background; an example of competency-based curricular experimentation utilizing practicing professionals; and some ideas and speculations concerning the future preparation of nurses.

It should be said at the outset that the responsibility for instruction and supervision of students rests with the nursing faculty and not with practicing professionals. Agency personnel are rarely given formalized responsibility for making individual student assignments or evaluating student progress. This separation between nursing service and nursing education is rooted in history.

HISTORICAL BACKGROUND

Historically, the first nursing programs were operated by hospitals with nursing students learning on-the-job as they provided patient care. For years an authoritarian, apprenticeship type of training remained relatively constant. Nursing students were overworked, subject to endless regulations, subservient to physicians and supervisors, with little room for an inquiring mind or an independent judgment (except when physicians were unavailable during the middle of the night).

Nursing leaders, far ahead of their times, gradually led in the transition of nursing schools *out* of the job setting and *into* the general stream of education. Mediocre schools closed as standards were raised. The phasing-out of most remaining three-year hospital-controlled-diploma schools during the fifties marked the beginning of a new era in nursing

education. Cutting the ties to hospitals and to persons who had been involved for years in nurse training left deep wounds. Certainly, many hospital programs were excellent and had produced many good nurses; but the separation helped free the preparation of nurses from the ritualism and methods of the past and provided the climate for developing a sound education system.

Curriculum changes and turmoil existed in the sixties. Criticism abounded from persons both internal and external to nursing, mainly in regard to the decreased amount of time students spent in hospitals. Since the majority of practicing professionals working in hospital settings were products of traditional hospital training programs, they may have been displaying professional jealousy toward nurses with bachelor's degrees. But also, most did not yet appreciate the changing health focus toward addressing needs to equip graduates of baccalaureate programs for beginning level positions in *any* health care setting; and to provide the neophyte nurse with the necessary skills to assist persons (not merely crisis intervention or sick care) in health *maintenance* and the *promotion* of high level of general health.

Although decreased time was spent in the hospital and more in other agencies, the clinical time was used more effectively and spent in patient-centered activities with less repetition, and more specific goals and preparation required. Clinical experience came to be viewed as a laboratory experience and therefore a time for applying knowledge, testing ideas, and developing skills. The high cost of a college education and the need to guarantee the public not just a *safe* practitioner but a highly predictable, quality product, added to the necessity for leaving the apprenticeship, "serendipity" learning to the past and maximizing opportunities for clinical practice.

In the future, nursing practitioners must fill new, expanded, and more independent roles and will need an even stronger foundation in the natural and social sciences; increased analytical and problem solving skills; teaching ability; physical assessment skills; and

increased communication and leadership capabilities; as well as basic technical competence, and a commitment to continued professional development. Competence cannot be brought to a consummate level in a basic educational program for the nurse, anymore than it can for the teacher, lawyer, or physician.

TERMINOLOGY

There are no commonly defined terms used in describing the specific time periods spent by nursing students in practice settings: each school selects its own terminology. Some of these terms are: clinical experience, clinical practice, clinical laboratory, clinical practicum, laboratory practice, laboratory experience, and field experience. These same terms are used as well to describe the practice component of graduate programs, and the numerous continuing education and short-term courses developed by both schools and health agencies.

The term *field experience* implies a lesser degree of formal faculty supervision and is most often used in relation to senior level practice outside of hospital settings, such as community health field experience. The term *affiliation* was used in the past to indicate a block of time spent in training at an institution away from the parent school with the instruction provided by the host institution. Affiliations are rarely necessary now, since schools unable to provide sufficient clinical experiences and faculty have closed.

Today's undergraduate nursing curriculums require many health care activities which are not accurately described by any of the above terms and are simply labeled as *patient* or *client experiences*. Some examples include participation in clinics and health screening programs; observational experiences; tours; conducting teaching or research projects; making assessments of aged persons; or assisting families on a continuing basis who are experiencing childbirth, surgery, or adjustment to long term health problems; and participating in health-planning activities.

Nursing students, like medical students, generally spend increasing

amounts of time in clinical practice as they advance in the program, although most courses in the nursing major contain both clinical and theoretical components (with clinical experience of varying amounts being an integral part of the course instead of a block of experience added after a number of theory courses). Opportunities are provided for immediate application of knowledge with the thread of practice woven through the nursing major.

It is no longer appropriate to consider a specified ratio of laboratory-to-class hours since the experiences are variable depending on the level of the student, complexity of the situation, and goals. In general, the amount of direct faculty supervision is proportionate to the number of decisions to be made and the potential for error, along with assessment of the individual student's wants and needs.

State Boards of Nursing no longer require specified numbers of certain experiences (such as deliveries, or surgical scrubs, or numbers of days on different clinical services). The curriculum as a whole, the quality of the experience, and the faculty are the critical items in accrediting schools of nursing. The national accrediting body, the National League for Nursing, also encourages innovation and allows freedom for experimentation.

THE PRESENT SCENE

Given the multiplicity of factors involved in arranging learning experiences for students, it would be extremely difficult to place the responsibility for clinical supervision in the hands of practicing professionals. The present curricular structure and approaches to learning, the amount of communication and reeducation required, and the need for many experiences unrelated to health agencies simply do not permit. Each health agency ordinarily does designate a person as the 'contact' with the various schools regarding arrangements for student experience.

The picture may be difficult from the student's standpoint. Clinical experiences may be so numerous, in so many different agencies, that the result is a lack of student confidence and security in any one setting. Practicing professionals feel that there may be a lack of commitment on the part of students educated at today's pace. Nursing *educators* remain convinced that today's student is more committed to the betterment of health for all people and to a lifetime of professional service. The flexibility and self reliance required in making frequent adjustments usually serves the graduate well, preparing him for future change.

Significant input is made by practicing professionals on an informal level, mainly through activities such as orienting students to clinical areas, communicating (both informally and in reporting sessions) regarding the student's patients, making walking-planning rounds, alerting students to possible learning activities, participating in patient care conferences and classes, and demonstrations. Some schools have a senior elective in which the student chooses a single practice area for additional experience. In these instances, more cooperation and reliance on practicing professionals is essential to increase the value of the experience. This is also the case during leadership experience where the student may spend some full, eight-hour laboratory periods in roles such as team leader, or primary nurse, working with the staff. In such experiences, the nurse who is usually in the leadership position is available for consultation.

Since the reader may be unfamiliar with nursing education, a description of a rather universal type of hospital-related, laboratory experience is as follows:

The student selects one or more patients who have health problems related to the content area he is studying at that time. He then utilizes the nursing process (problem solving) in preparing for the laboratory experience. He collects data from a variety of sources--the patient, family, physician, nursing staff, and medical record. His preparation includes the use of observational and interactional skills.

He takes a nursing history and makes an initial assessment of the patient as a whole. From the data he develops a nursing care plan, making a nursing diagnosis (identifying patient needs and problems) and determining tentative intervention and priorities. He may also return to the Procedural Development Laboratory to review and practice specific techniques involved in the patient's care. He also reviews the pathophysiology of the patient's problem, and the bases of medical intervention including drug therapy. The student will discuss his plan of care with faculty and classmates in a preconference session. After caring for the patient during the specified laboratory time, he will evaluate the care, report and record observations of the patient's status and then share his experiences with classmates in post-conference. Problems and decisions will be discussed. Applications will be made to other situations. Comparisons may be made (regarding persons of different groups with the same type of health problem, etc.). Depending on the focus of the course, the student may visit or care for the patient several times, accompany him to surgery or other therapy, and possibly make follow-up home visits. The possibilities for learning are obviously multiple.

THE NURSING SERVICE-NURSING EDUCATION GAP

Nursing educators, like those in other disciplines, have no illusions that the present patterns of laboratory practice are without fault. Student experience is often adversely affected by the existing gap between nursing service and nursing education. One of the consequences is to deprive students of positive interaction with other professionals, necessary to developing a strong professional self-concept. Another is the incongruency seen between the philosophies of faculty members and practicing professionals, and the frustration of young nurses in trying to practice as they were taught in settings where creativity and change are discouraged. Although today's students are not naive enough to believe that practicing professionals

automatically carry a guarantee of "good role model" (neither do faculty members) they may react openly to what they believe to be less-than-quality nursing care.

A more serious consequence of the gap results from hiring agencies placing new graduates in leadership positions or other difficult situations before new nurses have opportunities to adjust to the job setting and gain confidence. Survival becomes the norm, rather than providing individualized patient care, professional growth and development. The young nurse "joins the system," or becomes discouraged and seeks a safer arena of practice.

The times are finally ripe for sweeping changes. A feeling of mutual cooperation, recognition, respect and need is replacing the former separation and rivalry among nursing groups.

Health care is increasingly complex with more diagnostic and treatment options and technology. Hospitals are developing specialty units; new positions such as clinical specialist and nurse clinician are being created which free the nurse from some of the constraints of the system. These positions require increased educational preparation and have *instruction* of patients and staff included in their job descriptions. Accreditation of health agencies has resulted in administrative positions being upgraded, and it is no longer unusual for the nursing director to have both an administrative title and at least a master's degree. Large agencies require bachelor's degrees for head nurses and master's degrees for persons in positions such as director of continuing education or inservice. Community health agencies may require all their nurses to have bachelor's degrees. Many nurses without degrees are returning to college. External degree programs and open curricula are gaining credibility in nursing.

For faculty members it is humanly impossible to attain and maintain expertise in all areas of modern practice. Basic nursing curricula are integrated around concepts and principles which cut across specialty lines and require a generalist background. Younger faculty

may be products of generalist graduate programs also, and lack years of demonstrated clinical practice. They may experience insecurity in some clinical settings. As a result, some nursing educational administrators require faculty to spend time in actual nursing practice. Many individual nursing educators recognize the need to continue developing and sharpening their practice skills and obtain this experience on their own through such activities as practicing physical assessment one day a week in a clinic or physician's office, or working in the hospital's intensive care unit during vacations.

All of these changes have made the communication pipeline easier to establish between faculty and other nurses. With the added emphasis on continuing education for all nurses, multiple opportunities exist for dialogue to occur at workshops, seminars, conventions, and other meetings.

The American Nurses Association is leading state efforts to update nursing practice acts to include provision for mandatory continuing education as a requirement for license renewal. Florida's recently passed Revised Nurse Practice Act is an example.

Hospitals and other health agencies are recognizing the need for providing more guidance to new graduates, and are developing better orientation programs with greater initial supervision and continued guidance. These orientation programs are designed to encourage nurses returning to the work force, as are special refresher programs presently under development. Summer work-study programs for nursing students are offered by health agencies. Nursing students are also accepted more positively as part-time workers. Another development related to closing the gap, is the creation of internship programs, which last from six months to a year in length. The major drawback to these programs is lower salary--but opportunity is provided for gradual acclimation to the job setting with planned classes and supervision.

All of the programs mentioned are provided by the continuing education or inservice department of the hospital or agency.

In some university medical centers closer relationships exist with the nursing school. Key individuals may hold dual appointments with joint responsibilities. Adjunct faculty or courtesy appointments are extended to selected persons in service agencies by some schools of nursing. Such appointments provide needed recognition, but usually no monetary compensation.

Finally, to underscore the widespread changes occurring which will benefit clinical practice for nursing students, the theme selected for six regional conferences to be held during 1976 by the National League for Nursing is "Collaboration for Quality Health Care: Nursing Education--Nursing Service." Advanced publicity lists the purposes of those conferences as:

> Promote a more effective dialogue between nursing educators and nursing service personnel.
> Identify areas of mutual concern to nursing education and service.
> Delineate current and emerging nursing roles and responsibilities.
> Foster continued collaboration and communication to meet the nursing and health needs of people.

A COMPETENCY BASED EXPERIMENT

A massive amount of nursing curriculum innovation is taking place across the country. New patterns of clinical practice are being investigated, as are new instructional modes and roles for utilizing faculty and practicing professionals. Such efforts provide exciting challenges and have far reaching implications for the future of nursing education.

The nursing profession no longer attracts the television nurse stereotype. Learners run the gamut in terms of age, sex, race, educational and life experiences, responsibilities and goals. I believe that self directed, individualized self paced learning is no longer a

luxury but is becoming a necessity if the profession is to take advantage of the human resources now being attracted to the health professions. Unless the educational system can meet the needs of these multiple learners we face an era of discontent and stagnation.

For the past two years I have been involved as the faculty mentor in one such effort at Florida State University. The Curriculum of Attainments (COA) is an experimental, competency-based, time-variable program, with degrees awarded on the basis of demonstrated competencies without regard to how the competency was acquired or the amount of time required to attain the prescribed level of mastery. Three programs were selected for the initial development--undergraduate programs in Nursing, and Marine Biology; and the graduate program in Urban and Regional Planning. A number of other programs are now in various planning and implementation stages. Fifteen nursing students were randomly selected from volunteers out of a group of seventy-five students who had been accepted into the upper-division nursing major.

An important goal of the COA which is particularly relevant to this paper, is that of establishing a more direct relationship between the curriculum and the world of work. In addition to the obvious advantages of self pacing and individualization of learning, the results will hopefully provide for more relevant education and a smoother transition to practice.

The major goal of the COA is to set predetermined mastery standards for the degree. Although there is general agreement among baccalaureate programs regarding the outcomes of the program, these are not universally stated in terms of specific behaviors. During the process of identifying the behaviors and writing the competency statements the involvement of practicing professionals was invaluable in keeping the group focused on reality. The planning group expected to arrive at thousands of essential behaviors. Actually, about two hundred specific measurable competencies were identified and from these, twenty generic goals (or attainments) evolved. The specific competencies

were arranged into a four-level hierarchy under each of the twenty goals. Learning packages were then developed by grouping competencies into modules.

The process by which the behaviors were identified included: a survey of the literature to determine trends in nursing, health care delivery, and higher education; conferences with small groups of faculty with different clinical backgrounds; meetings with an advisory professional group representing health agencies where nursing students had clinical practice; analysis of course outlines; examinations and standardized test; identification of observable tasks of practicing professional nurses in a variety of settings; reading job descriptions for beginning level practice; and obtaining feedback from the total facuity as statements were written. As students are proceeding through the program, the initial competencies are being refined.

The mentor and students are free to move toward attainment of the competencies by the use of anything which teaches. Therefore, educational technology is effectively used in such a program at a decreased cost, as opposed to being tacked on to traditional, faculty centered, fixed time, normative grading, inflexible courses, as is often the case.

Tutors are selected by the mentor and students, and provide another important use of practicing professionals and faculty. The personal, unstructured involvement with small groups of students is particularly rewarding and beneficial to students and nursing personnel. A more informal, colleague relationship occurs and appear to have a more positive impact on the students' professional attitudes and values. *Faculty* may be more threatened by the tutor role than practicing professionals, since many are used to the shelter of a classroom setting.

Practicing professionals are also involved in the assessment process. Formative evaluation is an integral part of the learning packages but summative evaluation is a function of juries. The juries are composed of two faculty members and at least one practicing professional who assess the student's attainment of generic goals. A variety of methods are used to determine attainment of these multiple

knowledges and skills: comprehensive oral and written examinations, problem-solving activities, porfolios, and patient care activities in real or simulated settings.

Since jurying is a unique role for both faculty and practitioners there are no guidelines or precedents. Some of the problems arising involve: the time commitment necessary for planning and preparation; actual jury time with students; unrealistic expectations of some jurors; disagreements among jurors over standards; and the tendency to probe in relation to one's particular area of interest rather than hold to the stated competency. Exit juries have the responsibility and authority to certify the student's attainment of the generic competencies before he is awarded a degree.

There is no specific jury training other than the meetings to develop assessment criteria. The jurors need opportunities for trial runs to compare and validate ratings.

Selecting practicing professionals to participate in any training endeavor is still a highly subjective task. In nursing most choices are made by faculty after day-by-day, one-on-one communication with personnel in the practice settings. Other choices are made by the agency, often without much knowledge of the needs of the educational program. Group meetings, surveys and questionnaires may be helpful in weeding out personnel who would prefer not to be involved with students. Clinical competence would seem to be the most important quality needed by the practicing professional together with flexibility, interest in students, and an understanding of the purposes of the experience.

If there are many similar settings which seem adequate for student experience, a possible approach is to keep check-lists of the number of times that students have opportunity to practice the previously identified critical skills or activities in a given setting.

THOUGHTS ABOUT THE FUTURE

In my opinion the future will bring increased emphasis on developing the ability of the professional nurse to make decisions. We will see more simulation in learning laboratories where variables can be manipulated to prepare learners for solving problems in real situations and where the learner's competence can be assessed in terms of critical incidents.

Although the real key to learning is within the learner, another individual can be instrumental in unlocking the learner's potential. Therefore, I feel that more attention should be directed toward the task of identifying behaviors desirable in both the teacher and practicing professionals who have responsibility for instruction. To my knowledge there are no competency-based *graduate* programs preparing nursing faculty. Specific behaviors indicate of teacher competency have not been specified beyond general traits. A set of prescribed courses comprises graduate curricula. What advanced clinical skills are required of faculty? Are nurse-teacher behaviors different from those of other professions, or from other faculty in higher education? How does competency-based education affect creativity? Can quality instruction be attained by specifying critical teacher behaviors? Are there teacher-styles which should be matched with learner-styles? These are some of the questions which come to mind when contemplating the future.

CONCLUSION

Clearly the management of clinical practice for students of both the undergraduate and graduate levels in nursing will remain a faculty and student responsibility. The changing times, however, demand a more creative and extensive use of practicing professionals in the basic education and continued education of the nurse.

In a meeting I attended several years ago, a young male nurse stood to express his feelings regarding his educational preparation in this manner: "After completing a two year nursing program I gave good patient care. But after completing a baccalaureate program in nursing, when faced with similar situations, more options are available to me when making decisions."

The relationships in the clinical practice settings must be rearranged in new ways to that learners, as well as practicing professionals, can utilize the many options available to them. If such freedom of thought and action can be achieved, the possibilities for the future are exciting and vast with the health consumer the ultimate benefactor.

Clinical Experience and Clinical Practice in Teacher Education

editors

Each of the four previous papers in this monograph have examined the notions of clinical experience and clinical practice from the perspective of a particular discipline. The purpose of this final paper is to examine the clinical concept in teacher education.

Kerlinger (1973, p. 3n) defined a concept as "...a word that expresses an abstraction formed by generalizations from particulars." We shall examine generalizations from those particulars that pertain to that which *is* (or *might be*) clinical in teacher education.

The clinical concept is central to the notion of the School-Based Teacher Educator (an individual who has responsibilities for staff development and whose primary base of operation is the elementary or secondary school). Bridging the traditional dichotomy between preservice and inservice teacher education, the School-Based Teacher Educator is a classification of specialists in instructional improvement: teachers of teachers, or in a more Rogerian sense, facilitators of teacher learning, who fulfull their roles in elementary and secondary schools.

Confusion abounds concerning the meaning of "clinical" as an adjective in teacher education. As pointed out in the Foreword Good (1973, pp. 106-107) lists forty-six uses of *clinical* which seem to share no apparent commonality among them.

> How is "clinical" used in other professions? What does it denote?
>
> What are the implications for teacher education?

To pursue this inquiry in the most inductive manner possible, then, this paper contains the following elements:

> a brief review of the literature on the use of direct experience as a mechanism for preparation in five professions: medicine, pharmacy, dentistry, politics and the clergy. This literature review emphasizes direct experience because we found that in professions other than teacher education clinical refers to actual contact between the professional (or prospective professional) and clients.

a series of generalizations concerning clinical experience and clinical practice in professional education derived from the foregoing papers and literature search.

an examination of various clinical terms in teacher education.

criteria delineated for clinical experience in teacher education which transcend the previously mentioned gap between preservice and inservice.

two terms will be suggested, derived from the above, to be added to the lexicon of teacher education: clinical practice in teaching and teacher education clinician.

finally, implications will be drawn for the notion of the School-Based Teacher Educator.

DIRECT EXPERIENCE AS A MECHANISM FOR PROFESSIONAL PREPARATION

When the term "intern" is used, the most common occupational referent is the medical profession. The medical internship, developed in the United States by John Morgan, was originally designed to prepare medical school graduates to enter *general* practice (Harding, 1966). Because of the increasing movement of medical training toward specialization, the varied experiences and flexibility inherent in the original concept exist in somewhat altered form today.

An important notion incorporated in training the physician is the gradation of experience from undergraduate medical student, to intern, to resident. The responsibility delegated to the medical student is significant and increases with each successive level, while almost from the beginning involving him in active patient-care under close, constant supervision.

The physician-teacher and several students form a team in which each member is an active participant in the practice of medicine. The work of each individual is highly visible to other members of the team, and many opportunities are provided the medical student for interaction with a range of possible role models (McIntosh, 1968).

The key to progression of the medical student from phase to phase in the training program is evaluation. But at least one study (Francis, 1970) has charged that evaluation procedures and consequent upgrading in responsibilities given the student, tend to be based more upon personality characteristics of the physician-teacher and student than upon the student's ability to demonstrate learning.

The most specific evaluation procedures in the medical field seem to apply to the training of pharmacists. The State of Texas has established competencies and standards for the special certification of the practicing pharmacist-*supervisor*, as well as establishing specific exit competencies which the pharmacist-*intern* must display to complete the training program (Article 4542a, 1973).

In dental training, Houpt (1971) suggests that both the establishment of performance criteria for the trainee and special training in evaluation skills for the practitioner-trainer, are necessary for a successful direct experience training program. He found that dental school instructors were not able to accurately assess specific criteria of performance; that judgements among supervising dentists varied widely; and were, in fact, not significantly better thatn ratings by beginning dental students using the specific performance criteria.

Branch and Platt (1972) described a dental school which places students into clinical experience early in the first year of training. The designers of the program have discovered a problem which should be all too familiar to teacher educators--early introduction of direct experience in training has an appreciable socialization impact upon those who are being trained. During early clinical training, dental students showed increasingly greater identification with the role of dentist than dental student. This role-identification was tested in diverse ways, but the pervasive change in attitude among dental students was related to their instructors. Increasingly, they identified with their practitioner-dentist/mentor, while demonstrating corresponding increases in skepticism concerning the wisdom of their dental school-faculty supervisors.

A similar finding is reported in political intern programs. Frequently, once the political intern becomes a "learning"-staff-member, he tends to negate the academic portion of the internship and to minimize the input of the faculty supervisor (Hennessy, 1970).

The political internship enriches and complements the study of politics with a period of supervised participation *in* politics. Normally, the political internship is completed under a single mentor with no opportunities for the student to participate in varied political experiences or gain divergent views. Only during the post-internship period when students return to campus for evaluation and discussion sessions are the multiplicity of situations, experiences and concerns analyzed and critiqued.

This fragmentation of the political internship, as well as the somewhat haphazard nature of the assignments ("Whom do you want to work for?" "Do you want an intern?"), has lead Massachusetts to develop a State Internship Office. Established in 1972, this agency was to be responsive to the needs of students throughout the State, and to coordinate and/or consolidate the efforts of students, administrators, faculty, agency heads and bureaucrats (Cohen, 1974). Nothing in the literature reveals whether that agency has been able to solve any of the problems identified in political intern programs--e.g., training of politicians to perform competently as on-the-job teacher and evaluator,, or coordination between faculty supervisor and political mentor. Additionally, one as yet unresolved shortcoming deals with post-internship followup-discussions and analysis. They take place after-the-fact, at a time when it is impossible for students to try alternative approaches (Riel, 1972).

Ending this brief literature review with an examination of religious internship programs might give the reader hope of a soul-satisfying (forgive us) solution to the unresolved problems of direct experience as a training device. Unfortunately, this proves not to be the case.

In study after study, (Lohrmann, 1966; Olson, 1970; Clayton, 1971; Bradshaw, 1974), findings indicate a relationship between the approach

used in supervision and the kinds of learning achieved. Those findings also suggest a need for more specific and improved supervisory training--training that would attract more "flexible" supervisors (Olson, 1970) who could clearly differentiate between teaching students cognitive knowledge, and the acquisition of skills in interpersonal relationships.

The pastor-supervisor is perceived as one who provides the student with a positive image, acting as counselor, resource person and role model. Yet none of the studies reviewed reported satisfaction either with the functions performed by the supervisor or the positive learning experiences he provided the student. Some suggestions for improving theological education include a greater specification of objectives for the intern, and use of more appropriate, matched training situations.

GENERALIZATIONS ACROSS PROFESSIONS

After reviewing the literature cited above and the four more comprehensive papers in this monograph, the following generalizations have been drawn concerning clinical experience and clinical practice across the professions studied.

1. CLINICAL EXPERIENCE TENDS TO BE LIMITED TO PRE-SERVICE PREPARATION (LEADING TO ENTRANCE TO A PROFESSION). We could find no *inservice* skill-upgrading activities in these professions which were described as *clinical*.

2. IN THE PROFESSIONS STUDIED, THE TERM "CLINICAL" IS COMMONLY SYNONYMOUS WITH "FIELD." Clinical *experience*, when the term is used, refers to opportunities for the trainee to learn in *actual client* settings--whether that setting is a hospital, dental office, laboratory or business.

Clinical *practice*, on the other hand, differentiates the *qualified* (licensed) *professional* who *provides service to clients* from his colleagues who emphasize research and experimentation.

3. CLINICAL EXPERIENCE IS NORMALLY CONSIDERED AS A SPECIFIED PERIOD OF TIME RATHER THAN A PRESCRIBED SET OF SKILLS. The emphasis in clinical experience is on providing opportunities for prospective professionals both to *learn* and to *apply regularized modes of professional behavior*: the decision-making processes as circumscribed by the procedures of the profession.

4. CLINICAL EXPERIENCE AS A PRESERVICE PREPARATION ACTIVITY NORMALLY OCCURS VERY LATE IN THE PROFESSIONAL PROGRAM, OFTEN AS THE FINAL ACTIVITY.

5. ON-CAMPUS, DIDACTIC INSTRUCTION OFTEN IS NOT CONJOINED WITH THE REALITIES OF CLINICAL SETTINGS--THUS REINFORCING THE CONVENTIONAL WISDOM THAT THEORY AND PRACTICE ARE SEPARATE ENTITIES.

6. ASSESSMENT AND EVALUATION OF PERFORMANCE IN CLINICAL SETTINGS IS NOT UNIFORM WITHIN MOST OF THE PROFESSIONS STUDIED. The only exceptions identified were occupational therapy and pharmacy--and pharmacy, only in the state of Texas--in which uniform performance standard have been established.

7. PRACTICING PROFESSIONALS WHO SUPERVISE PARTICIPANTS IN CLINICAL SETTINGS HAVE A SIGNIFICANT "OCCUPATIONAL SOCIALIZATION" IMPACT: AND THUS HAVE TREMENDOUS POTENTIAL FOR BRINGING TO FULL FRUITION--OR UNDOING--PREVIOUS PREPARATION.

8. P PRACTICING PROFESSIONALS WHO SUPERVISE PARTICIPANTS IN CLINICAL SETTINGS GENERALLY RECEIVE NO SPECIALIZED PREPARATION OR RECOGNITION FOR ASSUMING THE ROLE OF MENTOR. BUT THE LITERATURE IN ALL PROFESSIONS STUDIED REFLECTS STRONG NEEDS FOR SUCH PREPARATION.

THE CLINICAL CONCEPT IN TEACHER EDUCATION

Clinical has been used in so many different ways, even in teacher education, that its meaning has become clouded. Within such a context it is difficult to consider new terms or to maintain consistent use of previously used concepts. Three terms, CLINICAL PROFESSOR, CLINICAL EXPERIENCE, and CLINICAL SUPERVISION, have been widely used and accepted in teacher education over the past decade. Their meanings are explored in the next section prior to introducing two other terms.

CLINICAL PROFESSOR

Conant (1964) coined the term *clinical professor* to describe a special type of college or university-level teacher educator; a professorial position with qualifications which included in-depth knowledge and skill both in subject matter and pedagogy. Conant primarily was concerned with establishing a valid link between college-campus instruction and teaching practice in elementary and secondary schools. The clinical professor was to be that link. Several institutions now use this term as a title for *any* college faculty member assigned to supervise student teachers. Other institutions of teacher preparation use clinical professor as the title for a practicing teacher whose services are purchased by the institution of higher education on a part-time basis (e.g., part-time teacher, and part-time *college* supervisor of student teachers).

CLINICAL SUPERVISION

Clinical supervision is a term originally coined in the literature by Goldhammer (1969), and is, in fact, the title of books by both Goldhammer and his mentor, Morris Cogan (1973). Both authors used clinical to differentiate their brand of in-the-classroom, face-to-face, data-based, *instructional* supervision system, from the more general *administrative* connotations of supervision.

Clinical supervision is a cyclical process, involving:

A pre-observation conference in which the teacher shares his instructional goals with a supervisor as they jointly clarify

goals and objectives and determine how to assess the extent to which the goals may be achieved;

Collection of data by the supervisor through actual classroom observation;

Analysis of data and preparation of conferencing strategies by the supervisor;

Sharing of data with the teacher in a post-observation conference; and

Joint planning of future goals for professional growth

The clinical supervision process is designed to assist the teacher in lessening incongruity between *intent* and *action* -- assisting the teacher to grow toward being the type of professional he or she wants to *become*. The process is systematically organized to foster that growth, operating from a data base rather than global value judgements. The intended outcome of the clinical supervision process is a teacher who becomes self-correcting; who moves from *super*-vision to *self*-vision, assuming increasing responsibility for further personal/professional growth, and basing that growth process on data rather than on intuition or emotion.

CLINICAL EXPERIENCE

Clinical experience has achieved broad popularity in teacher education over the past dozen years and a number of definitions--each differing somewhat from another--have been promulgated in the literature. Andrews used clinical experiences to describe specific opportunities for prospective teachers to work with children who had learning problems in school. The teacher trainee's function was to "make detailed diagnoses, prognoses, and propose treatment" for those children (Andrews, 1964, p. 28).

Broudy proposed a period of "clinical teaching" following laboratory work in teacher education, and preceding a period of supervised

internship. During the clinical teaching phase, the teacher trainee was to observe "real cases being treated by the experienced practitioner, the sort of situation that is common in medical education" (Broudy, 1972, p. 63).

Bennie defined clinical experiences as those activities that permit the prospective teacher to "participate in aspects of teaching in an active or passive role." The emphasis in clinical experiences is "diagnostic and analytical" (Bennie, 1972, p. 18).

The Association for Student Teaching (now known as the Association of Teacher Educators) published a monograph in 1970 entitled A Guide to Professional Excellence in Clinical Experiences in Teacher Education. In that work, the Association's executive committee extended the idea that "All direct and simulated activities in both the laboratory and the practicum phases of a modern program of teacher education are... clinical experiences" (p. 1). Clinical experiences are only one part of one component of teacher education programs.

> Programs of teacher preparation typically include general education, a teaching specialty, and professional education. The professional education component is further divided into three major types of activities. The accumulated knowledge and theoretical foundation of education as a field of study are made available through oral presentation, print, and other media. Clinical experiences provide opportunities for interpreting and applying principles and for developing teaching skills. The integration of experience and the development of individual attitudes and convictions are fostered through individualized teaching and guided group session (p. 10).

The Association's position on clinical experience is rooted in the notion of a "clinical study of teaching," described as:

> ...a continuous exploration and examination of educational possibilities in particular settings and under varying conditions. (The clinical study of teaching) is not a static exercise in demonstration of established ways. It is instead a constant quest for productive curricular plans and imaginative teaching strategies through studied experimentation, coordinated analytical assessment, and the consideration of alternative approaches (op., cit., p. 1).

A final project report from Michigan State University (1968) proposes a constitutive definition for clinical experience in teacher education:

> The three distinct elements which characterize every clinical experience are:
>
> 1. The element of client relatedness--in which there is actual or simulated, direct or indirect experience with pupils.
>
> 2. The element of manipulation of instructional variables--in which the trainee is responsible for one or more of the pedagogical preparations or operations of an instructional setting.
>
> 3. The element of using feedback (learning from doing)--in which the trainee practices and evaluates in such a way as to improve the effectiveness of his service to the pupils.
>
> Every trainee or practitioner experience which contains these three elements in a clinical experience, regardless of whether the experience occurs on the college campus or in the field.
>
> Clinical--The above three elements interact to give clinical a connotation which is greater than the sum of the parts. In the context of professional training, clinical connotes the behavior style (or the gaining of a behavior style) appropriate to providing a professional service to clients in order to produce some intended change and in such a manner as to learn from the experiences. (Michigan State University, 1968, p. II-4).

The general theme that seems to weave among these various definitions for clinical experience in teacher education is an emphasis on activities designed to foster an analytic, rational *professional behavior style* in *preservice* teachers. Thus, microteaching, simulation, early field experiences, and student teaching have been subsumed together within that class of activities.

The definitions above are not precise nor adequate, and need clarifying. Contrary to previous positions, we believe that *clinical* is an appropriate adjective *only when an activity requires certain types of behavior on the part of the participant, and under certain conditions.*

The sense to which we propose that clinical be restricted is consistent with the dictionary definition in medicine:

> "clinical...Pertaining to a clinic or to the bedside; pertaining to or founded on actual observation and treatment of patients, as distinguished from theoretical or experimental." (Dorland's Medical Dictionary, 1965, p. 314--emphasis our own.)

The following criteria for clinical experience in *teacher education* then may be applied.

THE INDIVIDUAL IS ENGAGED IN ACTUAL OBSERVATION AND TREATMENT OF CLIENTS: I.E., STUDENTS. This criterion would exclude simulations, protocol materials, and peer-teaching from classification as *clinical* experience. While differing significantly from the position of the Association of Teacher Educators (1970) and the Michigan State University report (1968) explicated earlier, this view is consonant with accepted usage in other professions.*

THE EXPERIENCE OCCURS IN NATURAL SETTINGS. This point is critical. The "make believe" ideal atmosphere of a campus laboratory school, the consciously miniaturized microteaching cell, and the convenience and relative safety of simulations and protocol materials, may all be useful tools for discrete skill learning. But they do not approximate *natural* conditions for the professional teacher.

THE INDIVIDUAL HAS THE OPPORTUNITY--AND POWER--TO MANIPULATE INSTRUCTIONAL VARIABLES. Without such opportunities, testing alternative approaches and evaluating consequences toward producing intended changes in students is not possible.

PERFORMANCE EXPECTATIONS OF THE INDIVIDUAL ARE EXPLICIT AND PUBLIC. The participant knows what is expected of him, a position advocated by the Association of Teacher Educators (1970, p. 1).

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*Reinforcing this point, one dentist of our acquaintance referred to the clinical aspect of his preparation rather indelicately as "wet-finger training."

FEEDBACK IS SYSTEMATICALLY PROVIDED TO THE INDIVIDUAL ON PERFORMANCE DEMONSTRATION. Few propositions are so universally accepted in the psychology of learning as the necessity of feedback to the acquisition of both knowledge and skills.

FEEDBACK IS PROVIDED IN A MANNER THAT ENCOURAGES INCREASING ASSUMPTION BY THE INDIVIDUAL OF PERSONAL RESPONSIBILITY FOR FUTURE PROFESSIONAL GROWTH. The *intent* here is the ideal of the self-correcting teacher; the *process* is *clinical supervision*.

Given these criteria, clinical experience can contribute significantly to the professional growth of inservice--practicing--teachers, rather than being restricted primarily to preservice preparation as has been the case to this point. Given the proper support conditions, clinical experience can be accomplished on-the-job by practicing professionals. By virtue of employment, the practicing teacher has at his disposal conditions which meet several of the aforementioned criteria: actual clients in a natural setting and the opportunity to manipulate instructional variables. What he *lacks* is assistance in *structuring* his professional behavior, and *data-based* feedback provided in a *facilitative, supportive* atmosphere.

CLINICAL PRACTICE IN TEACHER EDUCATION

If the reader accepts the delimitation proposed above--a specific denotation involving *actual observation and treatment*--then *any teacher* whose professional behavior is characterized by an *analytic, diagnostic, prescriptive* approach to instruction, could be identified as *clinical practitioner*. This usage would parallel clinical practice in psychology and medicine, where the clinical practitioner is a *qualified* (licensed) professional *who provides his service to clients*--and thus is differentiated from his peers who might devote the majority of their efforts to research and experimentation.

This explication applies only to clinical practice in *teaching*.

An additional step is required to consider adequately *clinical practice* in *teacher education*. The clinical practitioner in teacher education, we submit, must possess--in addition to the abilities necessary to implement analysis, diagnosis and treatment in instruction--the special quality of being able to assist another in achieving that mode of behavior.

> Clinician...An expert clinical physician and teacher. (Dorland's Medical Dictionary, op. cit.)

We do confess a certain uneasiness (born, no doubt, of guilt rooted in indebtedness) in so consistently turning to the training of physicians for guidance in what we are proposing. Yet the definition for *clinician* cited above very aptly adapts for our purposes. With minor modifications, it becomes:

> Teacher Education Clinician: an expert clinical teacher and clinical trainer of teachers.

IMPLICATIONS FOR THE SCHOOL-BASED TEACHER EDUCATOR

The implications of the foregoing analysis and discussion for the School Based Teacher Educator are obvious. The School Based Teacher Educator *is a clinician in teacher education*--capable both of implementing an analytic, diagnostic, prescriptive approach to instruction, and of assisting another in demonstrating that mode of professional behavior.

The School Based Teacher Educator demonstrates these behaviors in a wide range of instructional roles as a teacher of teachers, or as a facilitator of teacher learning. His primary base of operations is the elementary or secondary school--not the college or university classroom. He may be called a student teaching supervisor, team leader, inservice director, consultant, instructional strategist, or teacher specialist. Some of these roles now exist, while other roles will surface as work proceeds.

Central to these roles is the clinical concept delineated in this paper: a concept involving work (1) with *actual* students, with all their diversity of abilities and interests; (2) in *real* schools, with all the attendant distractions and complications; (3) rigorously applying *regularized procedures* for instructional decision-making; and (4) providing *data-based, supportive feedback* on performance. This clinical conceptualization bridges the traditional gap between preservice and inservice teacher education, providing a mechanism for improving both teaching and teacher education.

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